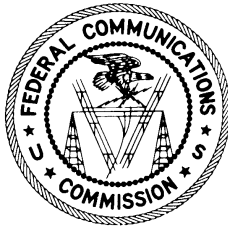


Internet Access Services: Status as of December 31, 2013

Industry Analysis and Technology Division
Wireline Competition Bureau
October 2014



This report is available for reference in the FCC's Reference Information Center, Courtyard Level, 445 12th Street, SW, Washington, DC. Copies may be purchased by contacting Best Copy and Printing, Inc., 445 12th Street, SW, Room CY-B402, Washington, DC 20554, telephone (800) 378-3160, or via their website at www.bcpiweb.com. The report can also be downloaded from the Wireline Competition Bureau Statistical Reports Internet site at www.fcc.gov/wcb/stats.

Table of Contents

Introduction.....	1
Figure 1 Fixed Connections and Mobile Connections by Speed 2010-2013	2
Figure 2 Speed Composition of Fixed Connections and Mobile Connections as of December 31, 2013	3
Connection speeds in detail	4
Figure 3(a) Distribution of Reportable Fixed Connections by Downstream Speed	5
Figure 3(b) Distribution of Reportable Fixed Connections by Upstream Speed	6
Figure 4(a) Distribution of Reportable Mobile Connections by Downstream Speed	7
Figure 4(b) Distribution of Reportable Mobile Connections by Upstream Speed	8
Providers by census tract by connection speed	9
Figure 5(a) Percentages of Households Located in Census Tracts Where Providers Report Residential Fixed-Location Connections of Various Speeds.....	9
Figure 5(b) Percentages of Households Located in Census Tracts Where Providers Report Residential Fixed-Location Connections of Various Speeds or Operate a Mobile Wireless Network Capable of Delivering Service of Various Speeds	10
Internet access adoption.	11
Figure 6 Fixed-Location Connections 1999-2013	11
Other report highlights.....	12
Residential subscribership	12
Household adoption of faster speeds	13
Census tract and county shares of households with reportable connections	13
Household adoption rates and subscribership demographics	13
Maps of providers by census tract	13
Remainder of the report.....	14
Detailed Summary Statistics: The Nation.....	15
Detailed Summary Statistics: The States	33
Detailed Summary Statistics: Counties and Census Tracts	49
Detailed Correlation Results: Demographic Measures	65
Technical Notes	79
Glossary	81

Internet Access Services: Status as of December 31, 2013

Introduction. This report summarizes information about Internet access connections over 200 kilobits per second (kbps) in at least one direction in service in the United States on December 31, 2013, as collected by FCC Form 477. Form 477 gathers standardized information about *subscriber*ship to Internet access services in the fifty states, District of Columbia, and inhabited insular areas (American Samoa, Guam, Northern Mariana Islands, Puerto Rico, and U.S. Virgin Islands). The information is reported by telephone companies, cable system operators, terrestrial wireless service providers, satellite service providers, and other facilities-based providers of advanced telecommunications capability.¹ This is the eleventh report to include details about subscriber differences among census tracts and counties, as well as subscriber differences among the states.²

Notable developments between December 2012 and December 2013 include:

- Internet connections overall are growing. The number of connections over 200 kbps in at least one direction increased by 12% year-over-year to 293 million.
- In December 2013, there were 78 million fixed and 133 million mobile connections with download speeds at or above 3 megabits per second (Mbps) and upload speeds at or above 768 kbps as compared to 65 million fixed and 65 million mobile connections a year earlier. Figure 1 illustrates the trend in connections speeds from December 2010 through December 2013, and Figure 2 presents a side-by-side comparison of fixed and mobile connection speeds in December 2013.³

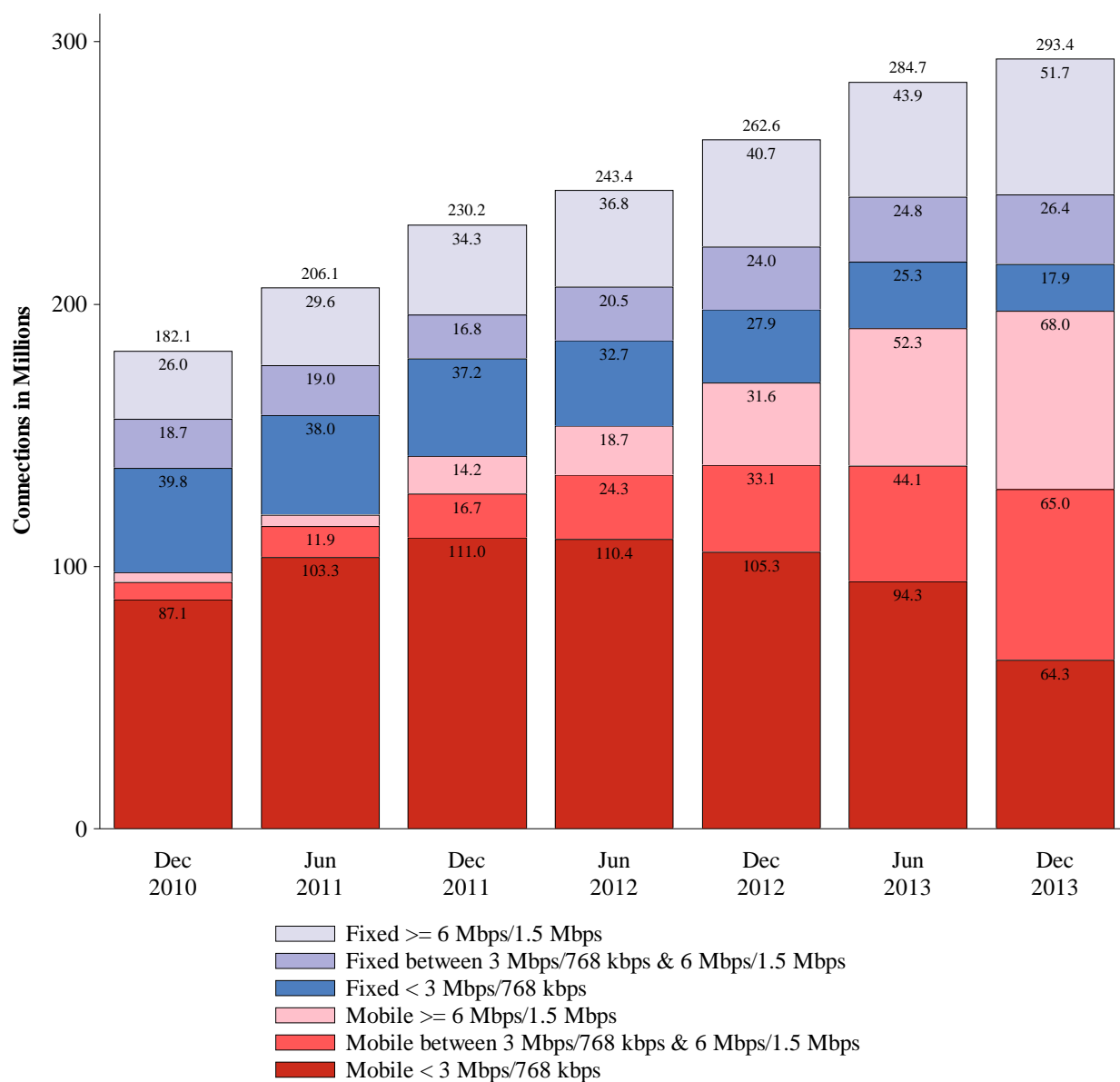
¹ See the Technical Notes and the Glossary that appear at the end of this report for more-detailed information about the Form 477 data collection and the meaning of terms used in this report.

Readers should note two key aspects of the Form 477 data. First, if service connections of different speeds are *available* to a particular consumer for purchase – from one or more suppliers – then only the purchased connection is counted by Form 477. Second, the reported connection speed is typically the advertised speed of the purchased service, and it is possible that the purchased service will not operate at its advertised speed at all times. The Commission has sponsored tests of actual consumer broadband speeds. See, e.g., Federal Communications Commission, Office of Engineering and Technology and Consumer and Governmental Affairs Bureau, *2014 Measuring Broadband America Fixed Broadband Report* (June 2014), available at www.fcc.gov/measuring-broadband-america.

² Census tract-level data were first collected for December 2008. For an overview of program history, see *High-Speed Services for Internet Access: Status as of December 31, 2008* (February 2010) (*December 2008 High-Speed Report*) at pp. 1-4, available at <http://www.fcc.gov/encyclopedia/high-speed-services-internet-access-reports>. Readers who are interested in historical trends in the Form 477 data should note the changes in reporting requirements that were effective in 2008 and earlier, in 2005.

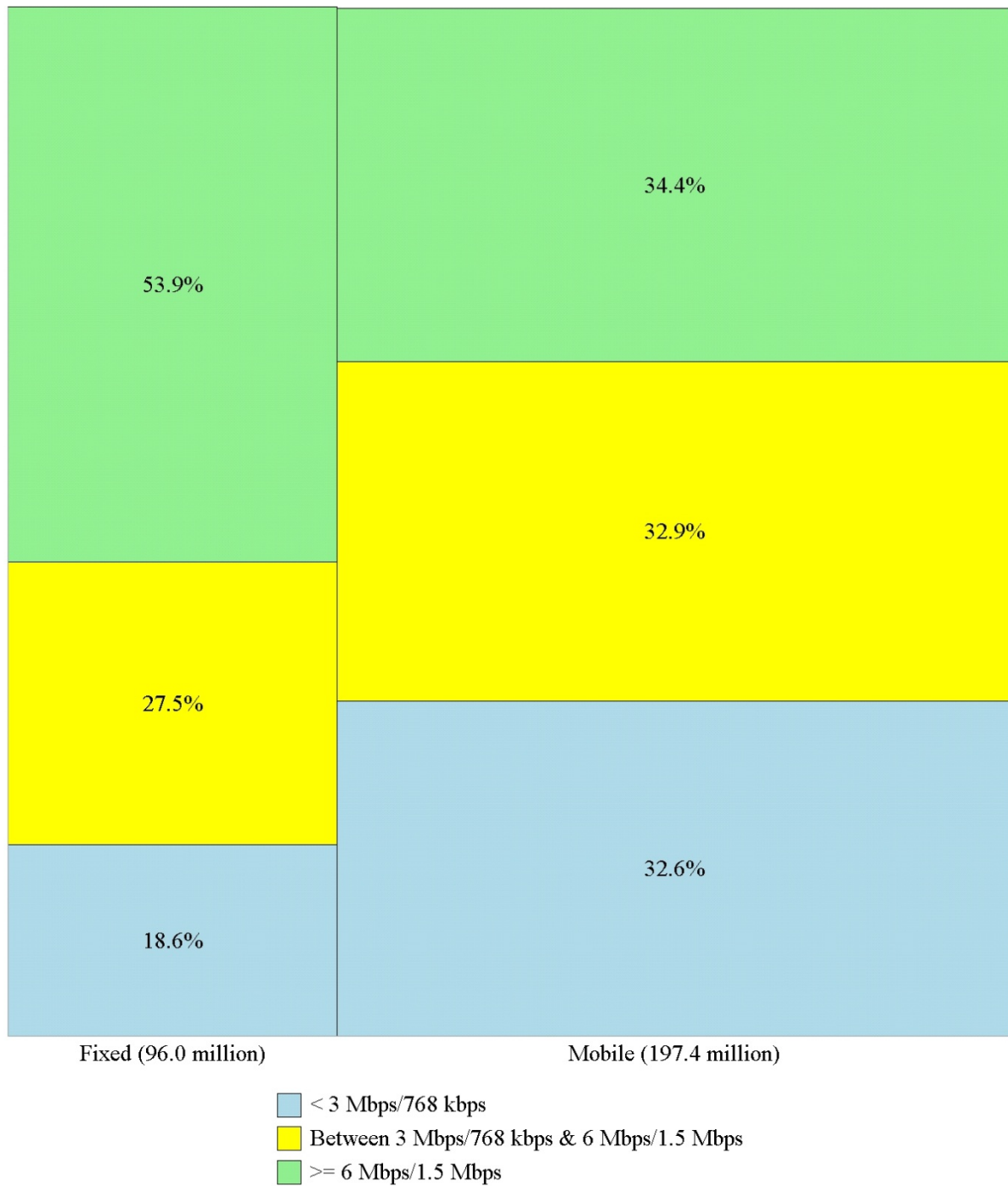
³ Reporting entities place connections into speed tiers defined by predetermined ranges of upload and download speeds. Note that the Commission has decided to implement a different approach starting with data as of June 30, 2014. For each fixed product subscribed to in a census tract, the provider will report connections by the maximum advertised upload and download speeds of the product in that census tract. For each mobile product subscribed to in a state, the provider will report connections by the minimum advertised upload and download speeds of the product in that state. As the Commission explained, while the maximum advertised speed is a reasonably reliable indicator of the speed of fixed service that subscribers receive, a wireless service provider's targeted minimum data speed in a market typically is a primary driver of the wireless network design that determines the market coverage boundaries. See *Modernizing the FCC Form 477 Data Program*, WC Docket No. 11-10, Report and Order, 28 FCC Rcd 9887, 9908-09, 9915, paras. 42 n.138, 62 (2013) (*June 2013 Form 477 Modernization Order*).

Figure 1
Fixed Connections and Mobile Connections by Speed 2010-2013*



* Some previously published data have been revised. Figures may not sum to totals elsewhere in this report due to rounding. Connections include both residential and business connections. In December 2013, total connections were reported as 30% residential fixed connections, 3% business fixed connections, 54% mobile connections to non-business subscribers, and 13% mobile connections to business subscribers.

Figure 2
Speed Composition of Fixed Connections and Mobile Connections
as of December 31, 2013



- The number of connections with downstream speeds of at least 10 Mbps increased by 104% over December 2012, to 122 million connections,⁴ including 64 million fixed connections and 58 million mobile connections.
- Growth is particularly high in mobile Internet subscriptions. The number of mobile subscriptions with speeds over 200 kbps in at least one direction grew to 197 million – up 16% from December 2012. The number of fixed-location connections at speeds over 200 kbps in at least one direction increased by 4% year-over-year to 96 million.

Connection speeds in detail. The Form 477 program categorizes reportable connections into 72 speed tiers defined by eight ranges of downstream and nine ranges of upstream speed. In this overview discussion, we organize the extensive information collected for December 2013 into three groups of downstream speeds and three groups of upstream speeds. We do this separately for fixed-location connections and for mobile connections. As in previous reports, we use the Form 477 speed tier breakpoints of 3 Mbps and 6 Mbps to organize the information about downstream speeds, and we use the Form 477 speed tier breakpoints of 768 kbps and 1.5 Mbps to organize the information about upstream speeds.⁵

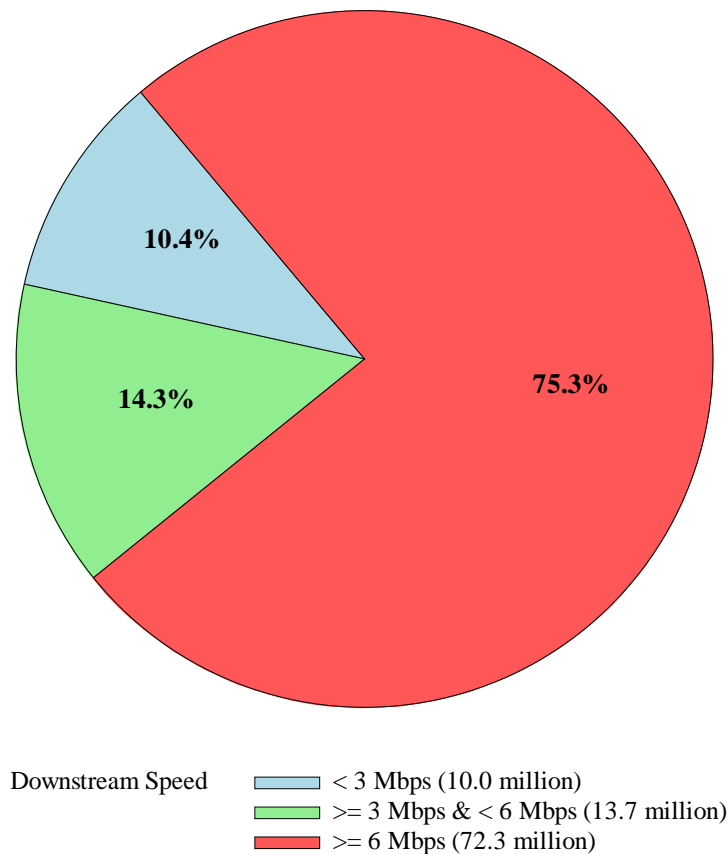
Fixed connections – downstream speeds. Figure 3(a) illustrates how the 96 million fixed connections reported for December 2013 were distributed across the three ranges of *downstream speed* defined by breakpoints at 3 Mbps and at 6 Mbps.

⁴ Compare Table 10 of this report with Table 10 of *Internet Access Services: Status as of December 31, 2012* (December 2013), available at <http://www.fcc.gov/reports/internet-access-services-reports>,

⁵ Our narrative discussion of the speeds of fixed connections is summarized more concisely in Chart 2, at p. 19, and our narrative discussion of the speeds of mobile connections is summarized more concisely in Chart 5, at p. 22.

The Commission benchmarked broadband as a transmission service that enables an end user actually to download Internet content at 4 Mbps and to upload Internet content at 1 Mbps over the service provider's network. That benchmark does not exactly match any Form 477 speed tier, and the Commission decided to evaluate the evidence of broadband availability using the Form 477-defined breakpoints of 3 Mbps downstream and 768 kbps upstream to proxy the speed benchmark of 4 Mbps downstream and 1 Mbps upstream. *See Inquiry Concerning the Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion, and Possible Steps to Accelerate Such Deployment Pursuant to Section 706 of the Telecommunications Act of 1996, Amended by the Broadband Data Improvement Act*, GN Docket Nos. 09-137, 09-51, Report, 25 FCC Rcd 95560, 9563, 9568, paras. 11, 20 (2010) (*Sixth Broadband Deployment Report*).

Figure 3(a)
Distribution of Reportable Fixed Connections (96.0 million) by
Downstream Speed as of December 31, 2013

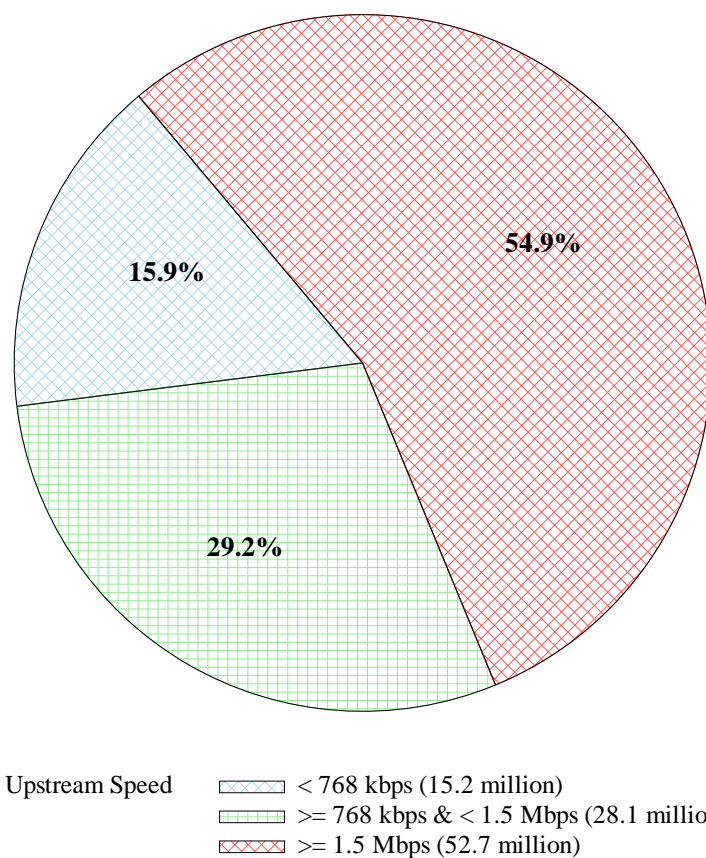


- In December 2013, 10% of reportable fixed connections (or 10 million connections) were slower than 3 Mbps in the downstream direction, 14% (or 13.7 million connections) were at least 3 Mbps in the downstream direction but slower than 6 Mbps, and 75% (or 72.3 million connections) were at least 6 Mbps in the downstream direction.⁶

Fixed connections – upstream speeds. Figure 3(b) illustrates how the 96 million fixed connections reported for December 2013 were distributed across the three ranges of *upstream speed* defined by breakpoints at 768 kbps and at 1.5 Mbps.

⁶ See Chart 2, at p. 19.

Figure 3(b)
Distribution of Reportable Fixed Connections (96.0 million) by
Upstream Speed as of December 31, 2013

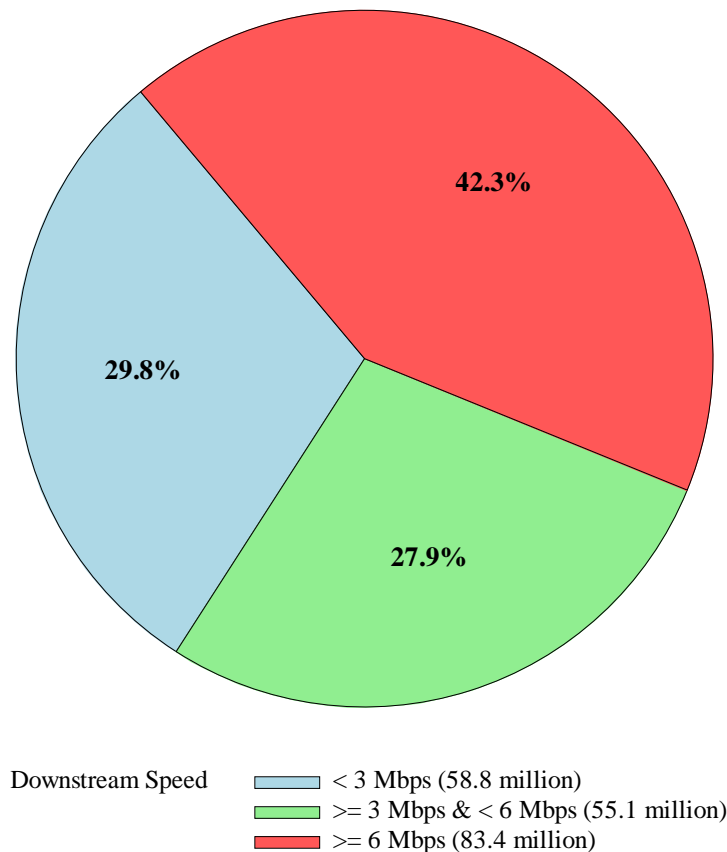


- In December 2013, 16% of reportable fixed connections (or 15.2 million connections) were slower than 768 kbps in the upstream direction, 29% (or 28.1 million connections) were at least 768 kbps in the upstream direction but slower than 1.5 Mbps, and 55% (or 52.7 million connections) were at least 1.5 Mbps in the upstream direction.⁷

⁷ *Ibid.*

Mobile connections – downstream speeds. Figure 4(a) illustrates how the 197 million mobile connections reported for December 2013 were distributed across the three ranges of *downstream speed* defined by breakpoints at 3 Mbps and at 6 Mbps.

Figure 4(a)
Distribution of Reportable Mobile Connections (197.4 million) by
Downstream Speed as of December 31, 2013

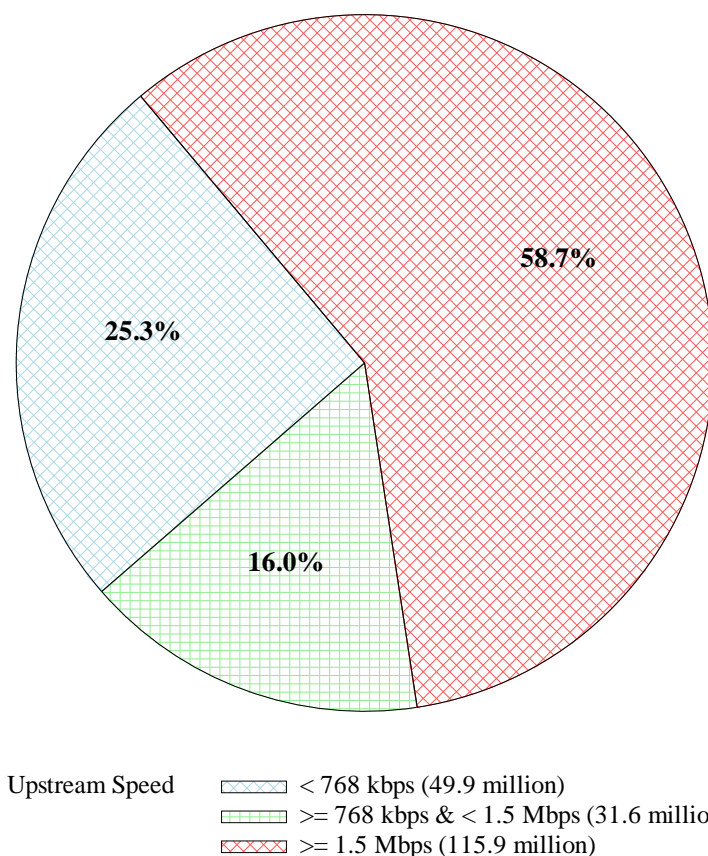


- In December 2013, 30% of reportable mobile connections (or 58.8 million connections) were slower than 3 Mbps in the downstream direction, 28% (or 55.1 million connections) were at least 3 Mbps in the downstream direction but slower than 6 Mbps, and 42% (or 83.4 million connections) were at least 6 Mbps in the downstream direction.⁸

Mobile connections – upstream speeds. Figure 4(b) illustrates how the 197 million mobile connections reported for December 2013 were distributed across the three ranges of *upstream speed* defined by breakpoints at 768 kbps and at 1.5 Mbps.

⁸ See Chart 5, at p. 22.

Figure 4(b)
Distribution of Reportable Mobile Connections (197.4 million) by
Upstream Speed as of December 31, 2013

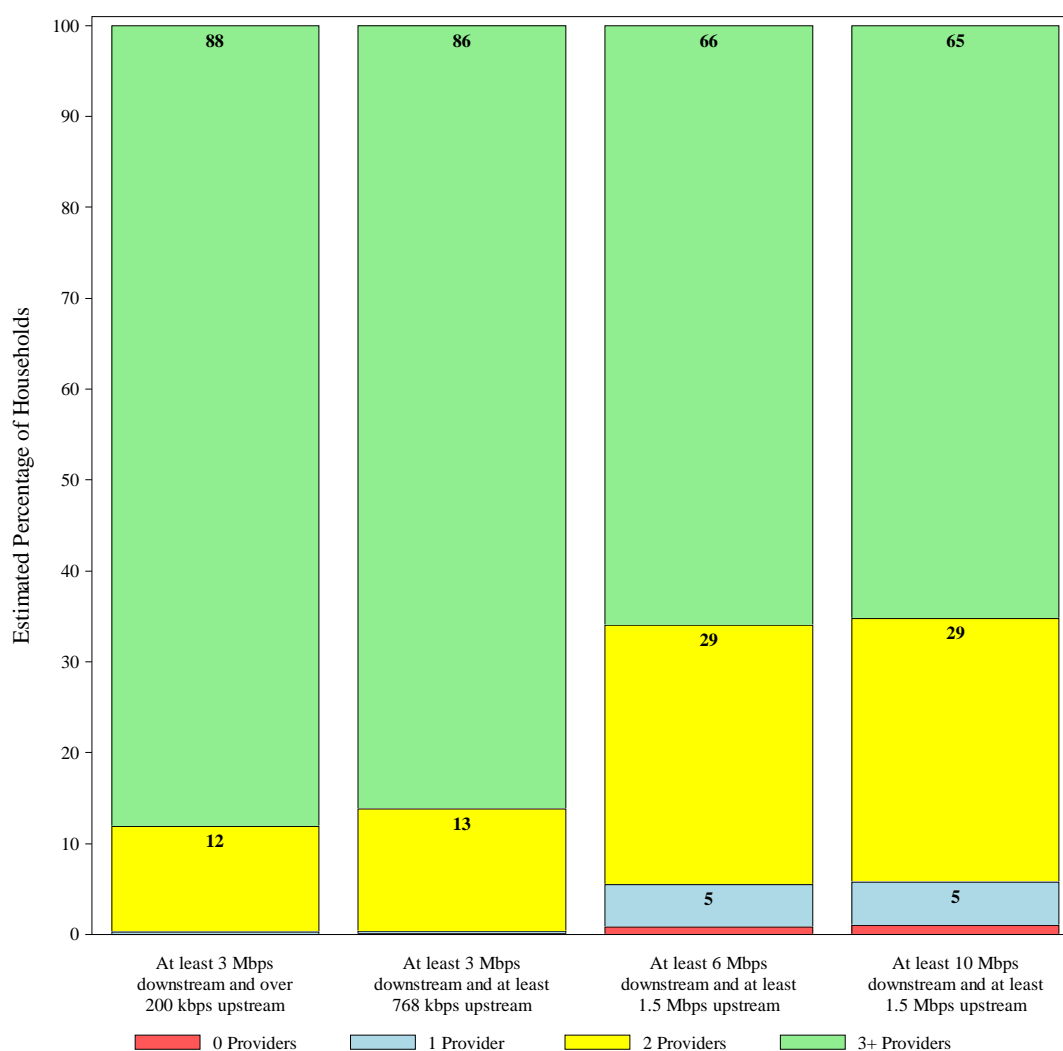


- In December 2013, about 25% of reportable mobile connections (or 49.9 million connections) were slower than 768 kbps in the upstream direction, 16% (or 31.6 million connections) were at least 768 kbps in the upstream direction but slower than 1.5 Mbps, and 59% (or 115.9 million connections) were at least 1.5 Mbps in the upstream direction.⁹

⁹ *Ibid.*

Providers by census tract by connection speed. In Figure 5(a), we estimate the percentages of households located in census tracts where zero, one, two, or three or more providers reported residential fixed-location connections of several different speeds in December 2013. In doing so, however, we emphasize that a provider that reports residential fixed-location connections of a particular speed in a particular census tract may not necessarily offer service at that speed everywhere in the census tract. Accordingly, the number of providers shown in Figure 5(a) does not necessarily reflect the number of choices available to a particular household, and does not purport to measure competition. We note that the Commission has adopted changes to Form 477 that will enable a more precise analysis in future.¹⁰

Figure 5(a)
Percentages of Households Located in Census Tracts Where Providers Report Residential Fixed-Location Connections of Various Speeds as of December 31, 2013

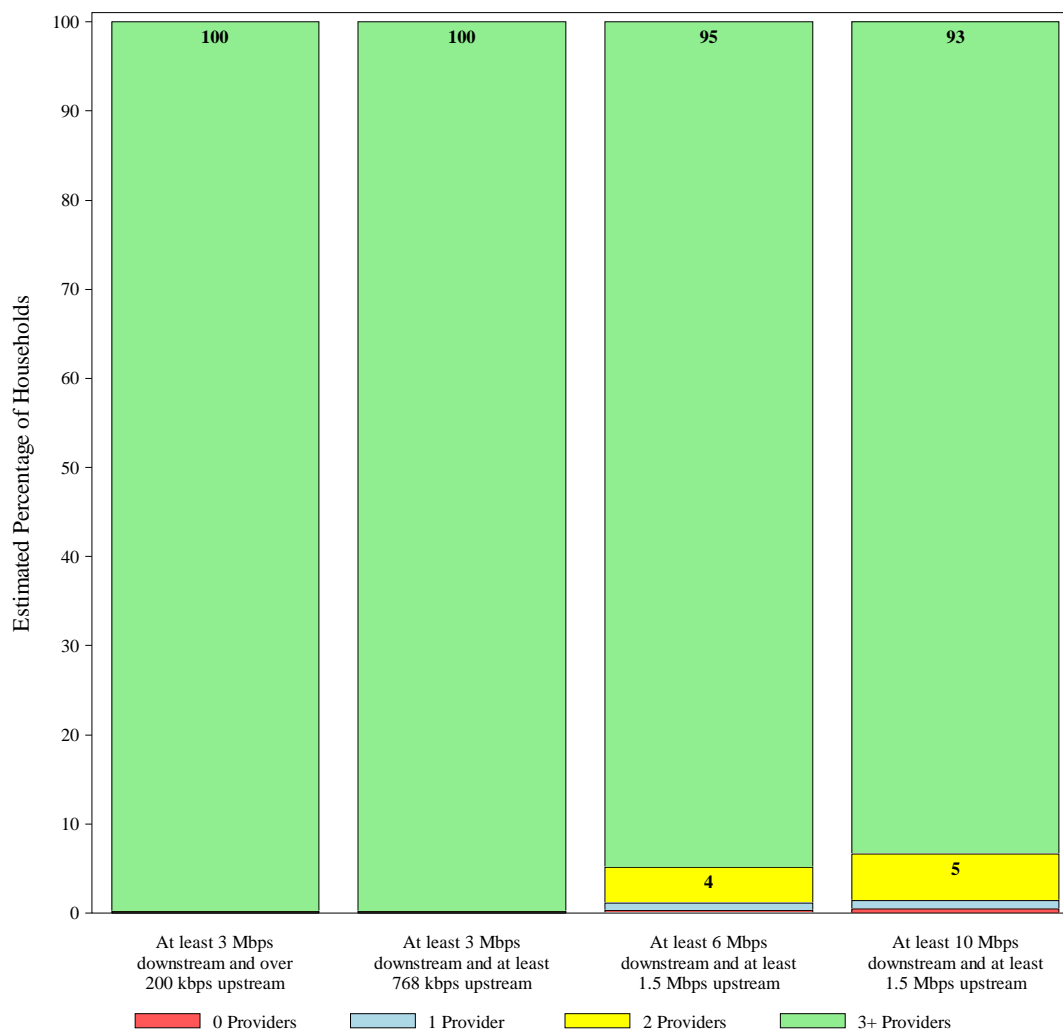


Column figures may not sum to 100% due to rounding.

¹⁰ The Commission is adding deployment information to Form 477 starting with data as of June 30, 2014, and the information about fixed broadband deployment will be reported by census block. (There are approximately 11 million census blocks and approximately 74,000 census tracts, although not all contain households.) See *June 2013 Form 477 Modernization Order*, 28 FCC Rcd at 9902-05, paras. 32-35.

In Figure 5(b), we estimate the percentages of households in census tracts where providers reported purchased residential fixed-location connections of different speeds *or* reported operating a mobile wireless network capable of sending or receiving data at the indicated speeds. Again, we emphasize that such providers may not necessarily offer services at those speeds everywhere in the census tract, and that these data do not necessarily reflect competition.

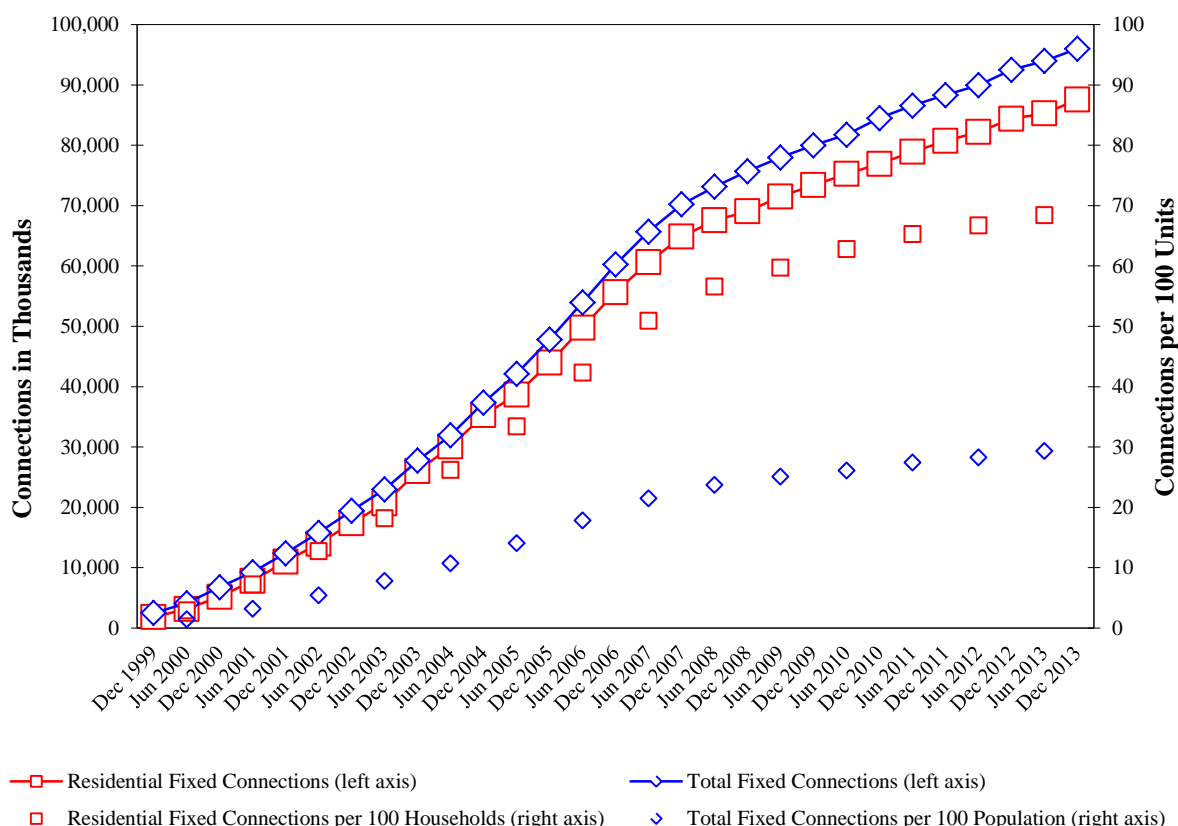
Figure 5(b)
Percentages of Households Located in Census Tracts Where Providers Report Residential Fixed-Location Connections of Various Speeds or Operate a Mobile Wireless Network Capable of Delivering Service of Various Speeds as of December 31, 2013



Column figures may not sum to 100% due to rounding.

Internet access adoption. The Commission has systematically collected, compiled, and published data about the adoption of fixed-location Internet access connections faster than 200 kbps in at least one direction for more than a decade. Figure 6 illustrates the adoption of fixed-location Internet access connections (that is, all reportable connections over 200 kbps in at least one direction except mobile wireless connections) since 1999.¹¹

Figure 6
Fixed-Location Connections 1999-2013
(Connections over 200 kbps in at least one direction)



- Between December 2003 and December 2013, total (business and residential) reportable fixed-location connections grew from 28 million connections to 96 million connections – at a compound annual growth rate of 13% per year.¹²

¹¹ For data through December 2004, only those providers with at least 250 connections in a state were required to report. Historical fixed-location connection counts not included in this report may be found in *June 2008 High-Speed Report* at Tables 1 and 3, available in Excel format at <http://www.fcc.gov/encyclopedia/high-speed-services-internet-access-reports>.

¹² The compound annual growth rate (CAGR) is a smoothed rate of growth calculated in three steps. First, divide the ending (December 2013) value by the beginning (December 2003) value. Second, raise the result of that division to a power equal to one divided by the number of years in the period (in this case, 10 years, so the power is 1/10). Third, subtract the number one from the result of the second step.

- Over the same ten-year period, residential fixed-location connections grew from 26 million connections to 88 million connections – also at a compound annual growth rate of 13% per year.
- As we reported previously, between June 2003 and June 2013, household adoption – which we track in Figure 6 by comparing the number of residential fixed-location connections over 200 kbps in at least one direction to the number of households – increased from 18 connections per 100 households to 69 connections per 100 households.¹³

Other report highlights.

Residential subscribership

- Residential fixed-location Internet access connections over 200 kbps in at least one direction increased by 4% between December 2012 and December 2013, to 88 million. See Table 3.
- Reported residential mobile wireless service subscribers with mobile devices and data plans for full Internet access increased by 21%, to 159 million, between December 2012 and December 2013. See Table 3.
- The reported data show a 28% annual increase in the number of residential fixed-location connections that are at least 6 Mbps downstream and 1.5 Mbps upstream (from 38.1 million in December 2012 to 48.6 million in December 2013) and a 27% annual increase in the number of connections that are at least 10 Mbps downstream and 1.5 Mbps upstream (from 38 million in December 2012 to 48.3 million in December 2013).¹⁴ See Chart 12.

¹³ See *Internet Access Services: Status as of June 30, 2013* (June 2014) at p. 12, available at <http://www.fcc.gov/reports/internet-access-services-reports>. We calculated residential fixed connections per 100 households using, in the denominator, U.S. household estimates from the Census Bureau's Current Population Survey (CPS) for July of each year and, for Puerto Rico and the other inhabited island areas, Census 2010 households for 2010 and later years and Census 2000 households for the earlier years. (The CPS also estimates U.S. households for March and November of each year.) Ratios calculated for different dates or by using alternative household estimates will differ somewhat from the ratios reported in Figure 6.

We also show total (including business as well as residential) fixed-location connections per 100 *population* in Figure 6, which we calculated using U.S. Census Bureau population estimates for the United States and Puerto Rico – which are as of July 1 each year – and, for the remaining inhabited island areas, Census 2010 population for 2010 and later years and Census 2000 population for the earlier years. This statistic, which is routinely reported by the Organization for Economic Cooperation and Development (OECD), incorporates connections to business locations into a comparison to persons. A more accurately measured indicator of this type would include only connections to residential locations, but OECD does not have comprehensive, consistent information about residential connections in the member countries. (We note that the ratio of accurately measured *residential* fixed-location connections to population has a maximum value for any given country and point in time – the value when *every* household is connected – if we assume that no household would have more than one fixed connection to its premises. For the United States in June 2013, for example, the maximum value would be 39 because there were about 125 million households in the United States and inhabited insular areas and a population of about 320 million according to the sources used for Figure 6.)

¹⁴ These increases are largely due to a change in upstream-speed reporting by a single aDSL services provider.

Household adoption of faster speeds

- As a national average in December 2013, there were 60 residential fixed-location connections per 100 households for connections with speeds that were reported to be at least 3 Mbps downstream and 768 kbps upstream.¹⁵ See Table 13.

Census tract and county shares of households with reportable connections

- We estimate the share of households with fixed-location Internet access connections over 200 kbps in at least one direction in individual census tracts and counties as of December 31, 2013. We continue to observe substantial variation among these estimates. See Charts 15 and 16.
- For both census tracts and counties, we continue to find estimates above 100% for the share of households with reportable fixed-location Internet access connections. While this is likely to occur more frequently in areas where the number of housing units is substantially greater than the number of households, such as resort areas and beach communities, these results suggest that some filers are not accurately assigning customer connections to census tracts, and anecdotal evidence supports that conclusion.¹⁶

Household adoption rates and subscribership demographics

- The report includes charts that illustrate correlations between household subscribership, or *adoption*, rates and demographic measures. We update charts based on income, household density, education, age, and race. The data indicate that some demographic variables are correlated with the adoption of Internet access service. See Charts 17-29.

Maps of providers by census tract

- Maps depict the number of providers of reportable connections by census tract: (1) providers of total (combined residential and business) reportable fixed-location connections, (2) providers of *residential* reportable fixed-location connections, (3) providers of *residential* fixed-location connections at least 3 Mbps downstream and 768 kbps upstream, and (4) providers making reportable mobile wireless service *available*.¹⁷

¹⁵ Increases over time in the ratio of residential fixed-location connections to households indicate that increasing shares of households are connected at home. The ratio is somewhat different from the “take rate” of offered service (which may also be called an “adoption rate”) because, as discussed in connection with Figure 5(a), some households may be located in areas where no fixed-location service is offered. These methodological differences are discussed in greater detail in *Inquiry Concerning the Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion, and Possible Steps to Accelerate Such Deployment Pursuant to Section 706 of the Telecommunications Act of 1996, Amended by the Broadband Data Improvement Act*, GN Docket No.11-121, Eighth Broadband Progress Report, 27 FCC Rcd 10342, 10386, para. 94 (2012).

¹⁶ For example, while contacting Form 477 filers with questions about reported data, FCC staff continue to find situations in which all connections reported for a county have been assigned to a single, anomalous census tract.

¹⁷ As discussed in the Technical Notes, a mobile wireless provider should only report service availability in census tracts where the provider operates a network capable of sending or receiving data at speeds above 200 kbps.

Remainder of the report. The remainder of the report consists of tables, charts, and maps that highlight different aspects of Internet access service subscriptions. This information is organized into four sections, as described below. As always, publicly accessible data that are too voluminous to include in this report are available online at www.fcc.gov/wcb/iatd/comp.html.

- Detailed Summary Statistics: The Nation. Tables 1-12 and Charts 1-14 focus in order on: number of connections, speed of connections, technology of connections, and number of providers.
- Detailed Summary Statistics: The States. Tables 13-21 present comparable information for the individual states and our estimates of the shares of households that are connected at different speeds.
- Detailed Summary Statistics: Counties and Census Tracts. Charts 15-16 and Tables 22-26 present information about differences among counties and census tracts. This section concludes with two maps that illustrate differences among census tracts in the estimated share of connected households and the four maps (discussed above) that illustrate providers by census tract.
- Detailed Correlation Results: Demographic Measures. Charts 17-29 present details of the correlations observed between the estimated share of connected households and demographic measures.

* * * *

We invite users of this information to suggest improvements in the data analysis by using the attached customer response form or sending comments to IATDreports@fcc.gov for subject: December 2013 Internet services data, and to participate in proceedings the Commission undertakes to improve the data collection.

Detailed Summary Statistics: The Nation

Contents of this section

Number of connections

Table 1	Connections over 200 kbps in at Least One Direction 2009-2013.....	17
Table 2	Connections at Least 3 mbps Downstream and 768 kbps Upstream 2009-2013	17
Table 3	Residential Connections over 200 kbps in at Least One Direction 2009-2013	17
Table 4	Residential Connections at Least 3 mbps Downstream and 768 kbps Upstream 2009-2013	17

Speed of connections

Chart 1	Distribution of Connections over 200 kbps in at Least One Direction as of December 31, 2013.....	18
Chart 2	Distribution of Fixed Connections over 200 kbps in at Least One Direction as of December 31, 2013.....	19
Chart 3	Distribution of Residential Connections over 200 kbps in at Least One Direction as of December 31, 2013.....	20
Chart 4	Distribution of Residential Fixed Connections over 200 kbps in at Least One Direction as of December 31, 2013.....	21
Chart 5	Distribution of Mobile Wireless Connections over 200 kbps in at Least One Direction as of December 31, 2013.....	22

Technology of connections

Table 5	Connections over 200 kbps in at Least One Direction by Technology 2009-2013.....	23
Chart 6	Connections by Technology as of December 31, 2013.....	23
Table 6	Residential Connections over 200 kbps in at Least One Direction by Technology 2009-2013.....	24
Chart 7	Residential Connections by Technology as of December 31, 2013.....	24

Connections by speed and technology

Table 7	Connections at Least 3 mbps Downstream and 768 kbps Upstream by Technology 2009-2013.....	25
Chart 8	Connections at Least 3 mbps Downstream and 768 kbps Upstream by Technology as of December 31, 2013.....	25
Table 8	Residential Connections at Least 3 mbps Downstream and 768 kbps Upstream by Technology 2009-2013.....	26
Chart 9	Residential Connections at Least 3 mbps Downstream and 768 kbps Upstream by Technology as of December 31, 2013.....	26
Chart 10	Residential Fixed Connections over 200 kbps in at Least One Direction 2009-2013 (Shares of selected technologies)	27
Chart 11	Residential Fixed Connections over 200 kbps in at Least One Direction 2009-2013 (Net adds for selected technologies).....	27
Chart 12	Residential Fixed Connections by Technology as of December 31, 2013 (Shares of selected technologies for selected speeds)	28
Table 9	Residential Connections by Technology and Speed (BTOP/BIP Definition) as of December 31, 2013.....	29

Chart 13	Residential Connections (BTOP/BIP Definition) by Technology as of December 31, 2013.....	29
Table 10	Connections by Downstream Speed Tier and Technology as of December 31, 2013	30
Table 11	Residential Connections by Downstream Speed Tier and Technology as of December 31, 2013.....	31

Number of providers

Table 12	Nationwide Number of Providers of Connections over 200 kbps in at Least One Direction by Technology 2009-2013	32
Chart 14	Nationwide Number of Providers of Connections over 200 kbps in at Least One Direction, Selected Technologies 2009-2013	32

Table 1
Connections over 200 kbps in at Least One Direction 2009-2013
(In thousands)

<i>Technology</i>	2009	2010		2011		2012		2013	
	<i>Dec</i>	<i>Jun</i>	<i>Dec</i>	<i>Jun</i>	<i>Dec</i>	<i>Jun</i>	<i>Dec</i>	<i>Jun</i>	<i>Dec</i>
Total	136,294	157,017	182,065	206,131	230,201	243,359	262,564	284,692	293,397
Total Fixed	79,994	81,764	84,521	86,575	88,317	89,945	92,511	93,986	96,032
Mobile Wireless	56,300	75,253	97,544	119,556	141,883	153,414	170,053	190,706	197,365

Table 2
Connections at Least 3 Mbps Downstream and 768 kbps Upstream 2009-2013
(In thousands)

<i>Technology</i>	2009	2010		2011		2012		2013	
	<i>Dec</i>	<i>Jun</i>	<i>Dec</i>	<i>Jun</i>	<i>Dec</i>	<i>Jun</i>	<i>Dec</i>	<i>Jun</i>	<i>Dec</i>
Total	40,669	45,552	55,110	64,819	82,015	100,268	129,398	165,110	211,218
Total Fixed	38,963	41,364	44,694	48,577	51,097	57,243	64,657	68,673	78,175
Mobile Wireless	1,706	4,188	10,416	16,242	30,918	43,025	64,741	96,437	133,043

Table 3
Residential Connections over 200 kbps in at Least One Direction 2009-2013
(In thousands)

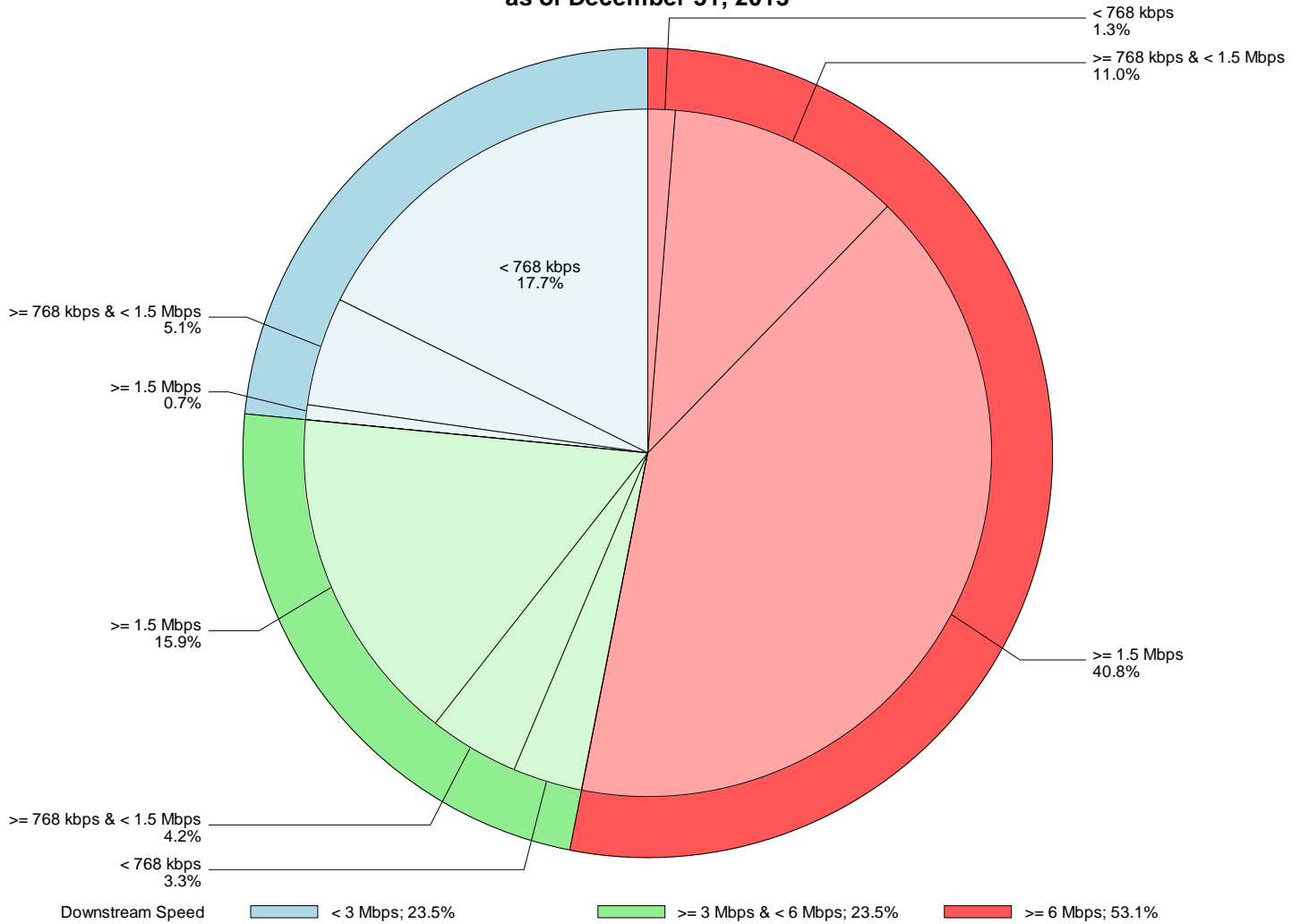
<i>Technology</i>	2009	2010		2011		2012		2013	
	<i>Dec</i>	<i>Jun</i>	<i>Dec</i>	<i>Jun</i>	<i>Dec</i>	<i>Jun</i>	<i>Dec</i>	<i>Jun</i>	<i>Dec</i>
Total	117,089	132,567	149,441	171,773	186,516	196,665	215,817	235,273	246,797
Total Fixed	73,394	75,251	76,918	78,906	80,706	82,217	84,392	85,277	87,599
Mobile Wireless	43,695	57,316	72,523	92,867	105,810	114,448	131,425	149,996	159,197

Table 4
Residential Connections at Least 3 Mbps Downstream and 768 kbps Upstream 2009-2013
(In thousands)

<i>Technology</i>	2009	2010		2011		2012		2013	
	<i>Dec</i>	<i>Jun</i>	<i>Dec</i>	<i>Jun</i>	<i>Dec</i>	<i>Jun</i>	<i>Dec</i>	<i>Jun</i>	<i>Dec</i>
Total	38,426	42,243	47,632	51,783	63,736	78,609	105,749	137,792	179,840
Total Fixed	36,844	39,037	41,769	45,263	47,427	53,070	59,914	63,342	72,476
Mobile Wireless	1,582	3,206	5,863	6,520	16,309	25,539	45,835	74,450	107,364

Note: Some historical data have been revised. Figures may not sum to totals due to rounding.
Source: FCC Form 477, Parts I and VI.

Chart 1
Distribution of Connections over 200 kbps in at Least One Direction
as of December 31, 2013



Connections over 200 kbps in at Least One Direction (in thousands)

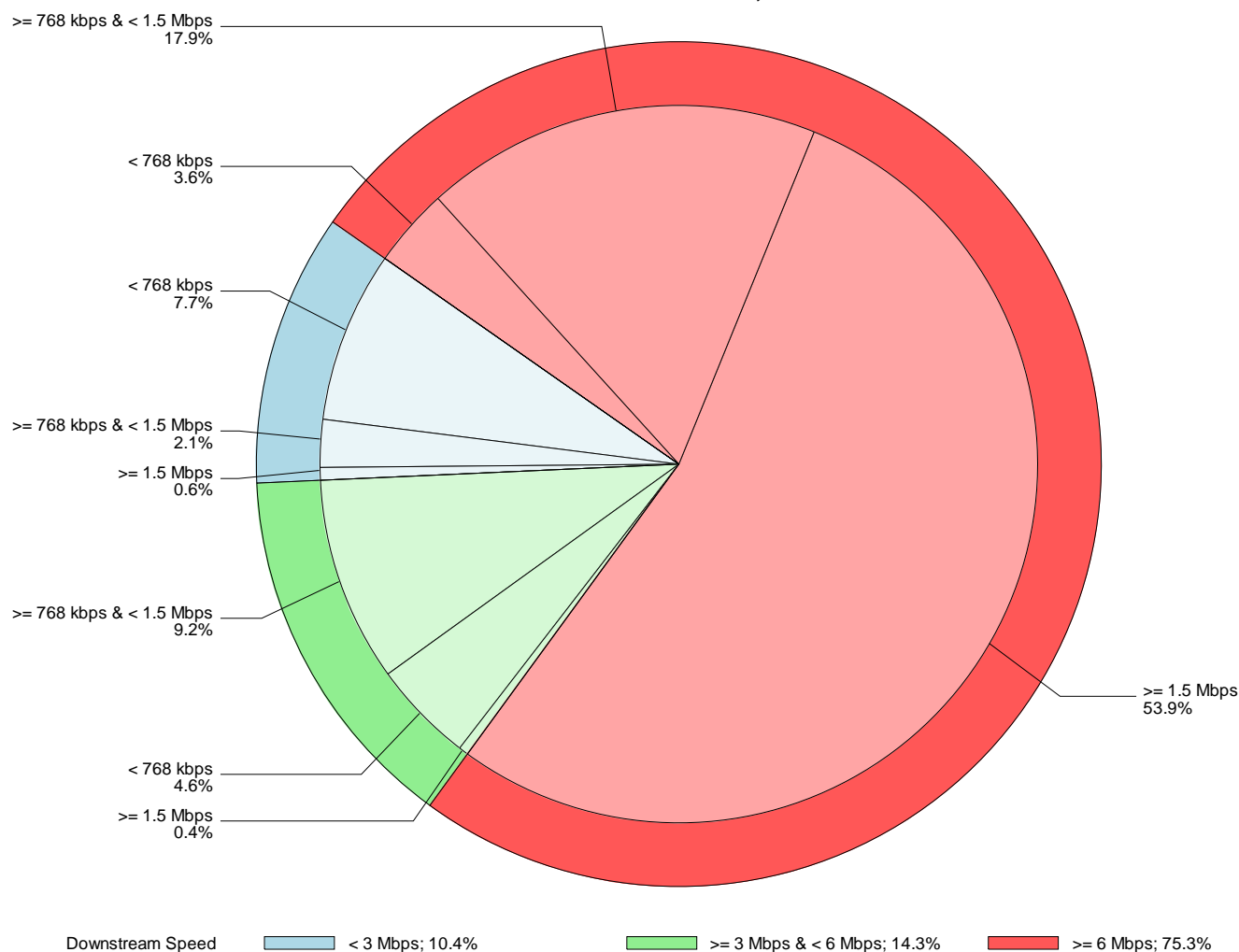
Upstream Speed	Downstream Speed			Total
	Less than 3 Mbps	At least 3 Mbps and less than 6 Mbps	At least 6 Mbps	
Less than 768 kbps	51,794	9,590	3,754	65,138
At least 768 kbps & Less than 1.5 Mbps	14,981	12,463	32,258	59,703
At least 1.5 Mbps	2,060	46,761	119,735	168,556
Total	68,836	68,815	155,746	293,397

Percentages

Less than 768 kbps	17.7	3.3	1.3	22.2
At least 768 kbps & Less than 1.5 Mbps	5.1	4.2	11.0	20.3
At least 1.5 Mbps	0.7	15.9	40.8	57.4
Total	23.5	23.5	53.1	100.0

Note: Figures may not sum to totals due to rounding.
Source: FCC Form 477, Part I.

Chart 2
Distribution of Fixed Connections over 200 kbps in at Least One Direction
as of December 31, 2013



Fixed Connections over 200 kbps in at Least One Direction (in thousands)

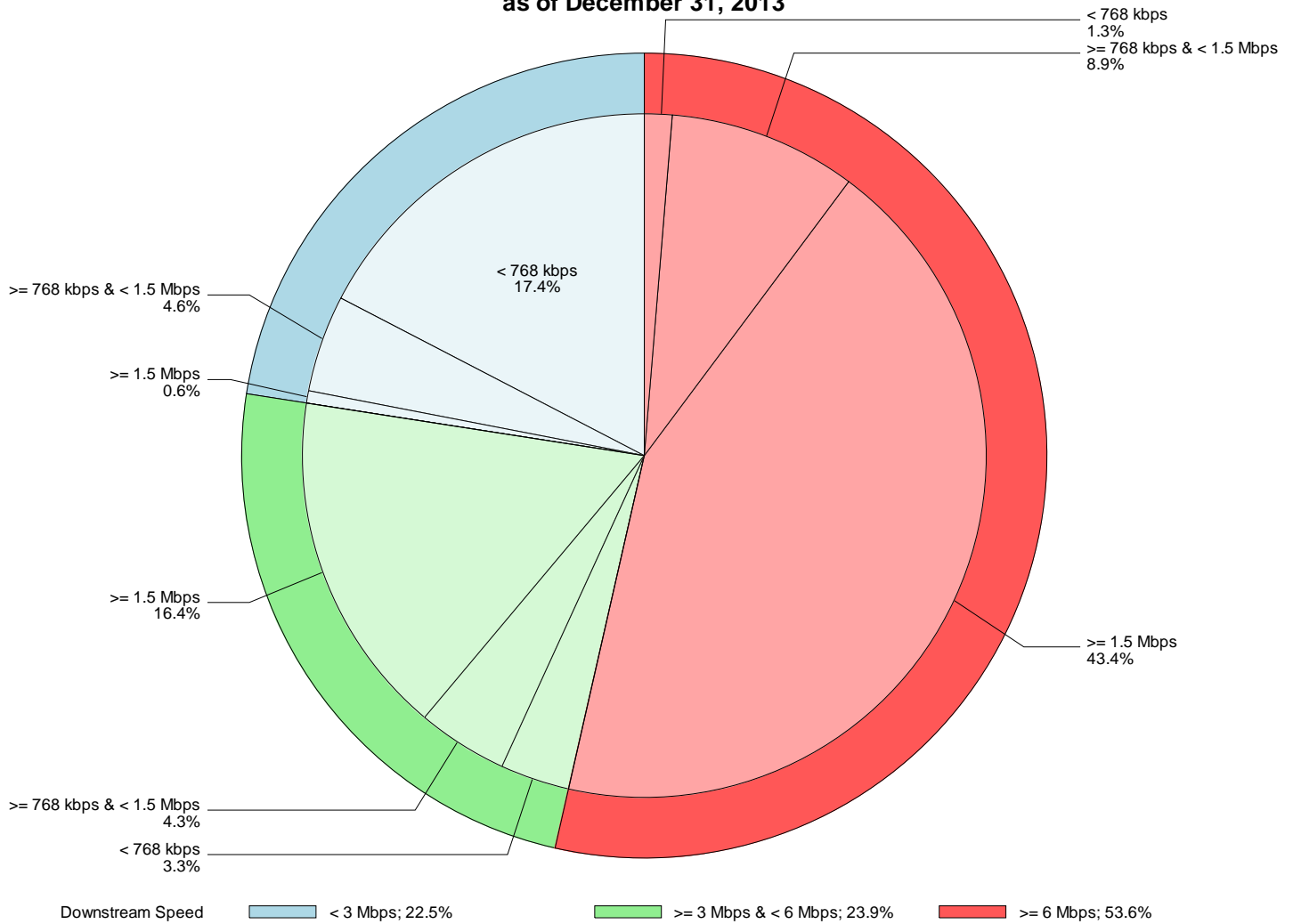
Upstream Speed	Downstream Speed			Total
	Less than 3 Mbps	At least 3 Mbps and less than 6 Mbps	At least 6 Mbps	
Less than 768 kbps	7,413	4,409	3,420	15,242
At least 768 kbps & Less than 1.5 Mbps	2,064	8,863	17,161	28,088
At least 1.5 Mbps	552	415	51,736	52,703
Total	10,029	13,686	72,317	96,032

Percentages

Less than 768 kbps	7.7	4.6	3.6	15.9
At least 768 kbps & Less than 1.5 Mbps	2.1	9.2	17.9	29.2
At least 1.5 Mbps	0.6	0.4	53.9	54.9
Total	10.4	14.3	75.3	100.0

Note: Figures may not sum to totals due to rounding.
Source: FCC Form 477, Part I.

Chart 3
Distribution of Residential Connections over 200 kbps in at Least One Direction
as of December 31, 2013



Residential Connections over 200 kbps in at Least One Direction (in thousands)

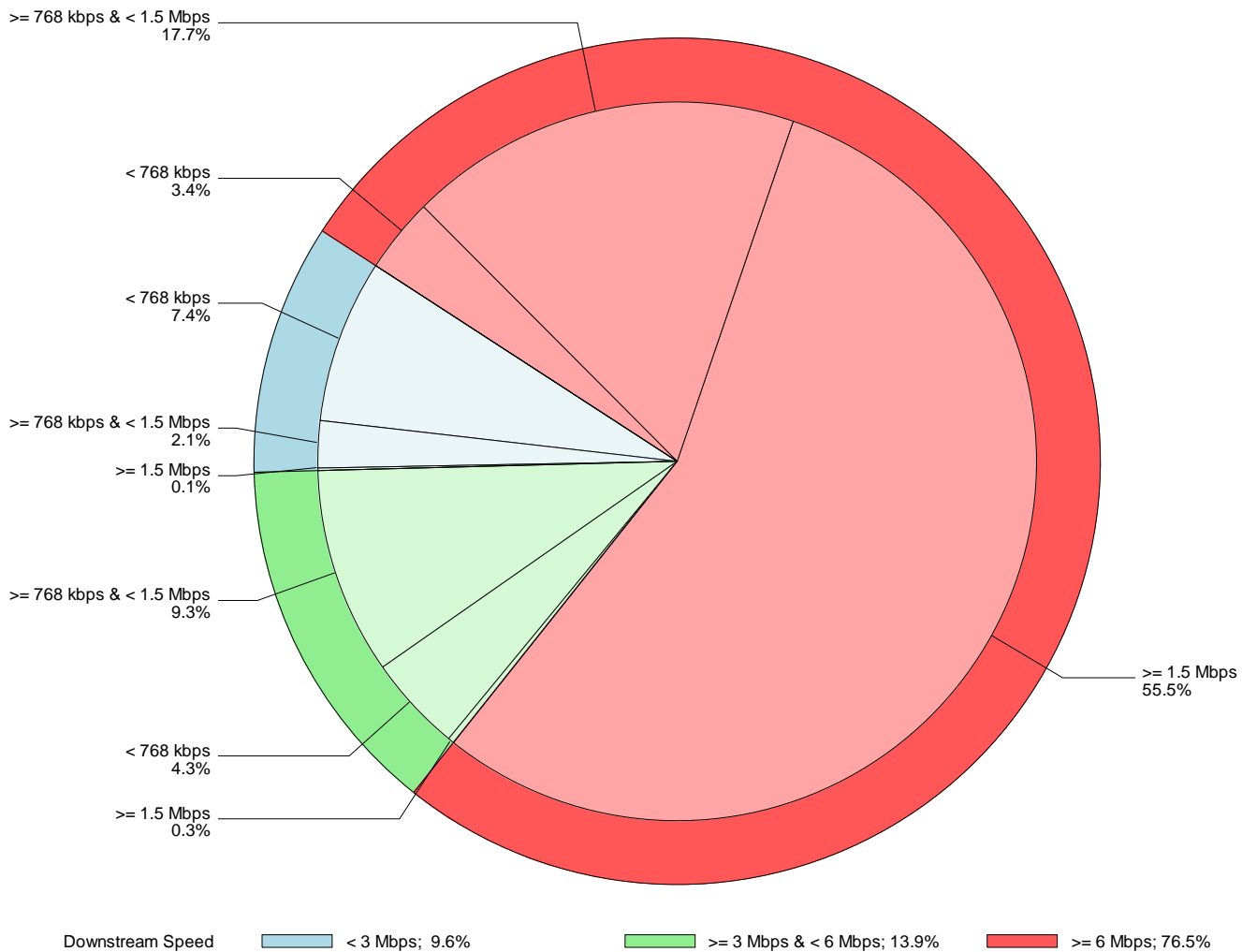
Upstream Speed	Downstream Speed			Total
	Less than 3 Mbps	At least 3 Mbps and less than 6 Mbps	At least 6 Mbps	
Less than 768 kbps	42,886	8,086	3,239	54,211
At least 768 kbps & Less than 1.5 Mbps	11,299	10,554	21,941	43,794
At least 1.5 Mbps	1,446	40,353	106,992	148,791
Total	55,631	58,993	132,172	246,797

Percentages

Less than 768 kbps	17.4	3.3	1.3	22.0
At least 768 kbps & Less than 1.5 Mbps	4.6	4.3	8.9	17.7
At least 1.5 Mbps	0.6	16.4	43.4	60.3
Total	22.5	23.9	53.6	100.0

Note: Figures may not sum to totals due to rounding.
Source: FCC Form 477, Parts I and VI.

Chart 4
Distribution of Residential Fixed Connections over 200 kbps in at Least One Direction
as of December 31, 2013



Note: Inner circle (light shading) represents upstream speeds.

Residential Fixed Connections over 200 kbps in at Least One Direction (in thousands)

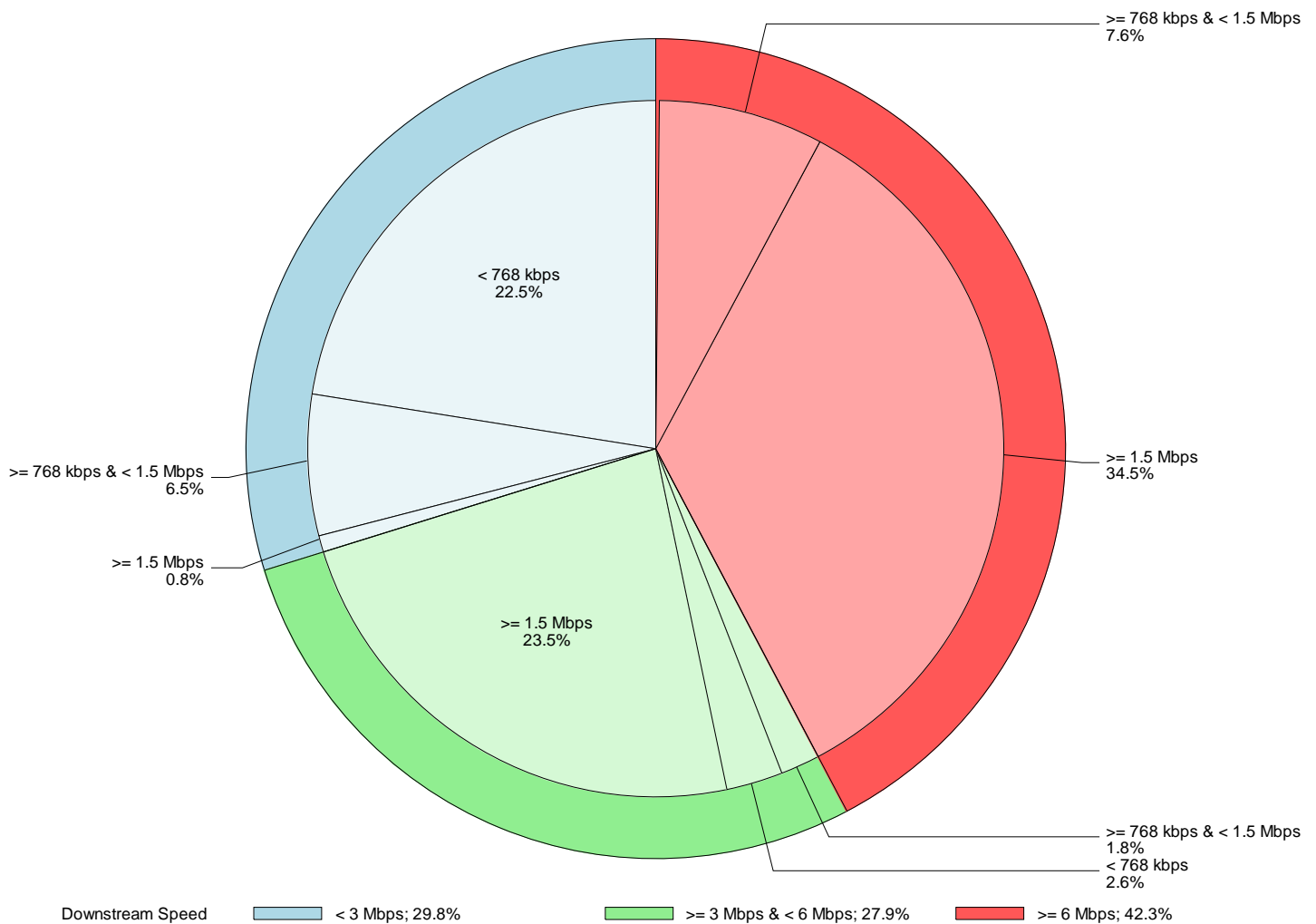
Upstream Speed	Downstream Speed			Total
	Less than 3 Mbps	At least 3 Mbps and less than 6 Mbps	At least 6 Mbps	
Less than 768 kbps	6,445	3,784	2,946	13,175
At least 768 kbps & Less than 1.5 Mbps	1,846	8,142	15,509	25,497
At least 1.5 Mbps	101	244	48,581	48,926
Total	8,393	12,170	67,036	87,599

Percentages

Less than 768 kbps	7.4	4.3	3.4	15.0
At least 768 kbps & Less than 1.5 Mbps	2.1	9.3	17.7	29.1
At least 1.5 Mbps	0.1	0.3	55.5	55.9
Total	9.6	13.9	76.5	100.0

Note: Figures may not sum to totals due to rounding.
Source: FCC Form 477, Part VI.

Chart 5
Distribution of Mobile Wireless Connections over 200 kbps in at Least One Direction
as of December 31, 2013



Note: Inner circle (light shading) represents upstream speeds.

Mobile Wireless Connections over 200 kbps in at Least One Direction (in thousands)

<i>Upstream Speed</i>	<i>Downstream Speed</i>			<i>Total</i>
	<i>Less than 3 Mbps</i>	<i>At least 3 Mbps and less than 6 Mbps</i>	<i>At least 6 Mbps</i>	
Less than 768 kbps	44,381	5,181	334	49,896
At least 768 kbps & Less than 1.5 Mbps	12,918	3,601	15,097	31,615
At least 1.5 Mbps	1,508	46,346	67,999	115,853
Total	58,807	55,128	83,430	197,365

Percentages

Less than 768 kbps	22.5	2.6	0.2	25.3
At least 768 kbps & Less than 1.5 Mbps	6.5	1.8	7.6	16.0
At least 1.5 Mbps	0.8	23.5	34.5	58.7
Total	29.8	27.9	42.3	100.0

Note: Figures may not sum to totals due to rounding.
Source: FCC Form 477, Part I.

Table 5
Connections over 200 kbps in at Least One Direction by Technology 2009-2013
(In thousands)

	2009	2010		2011		2012		2013	
Technology	Dec	Jun	Dec	Jun	Dec	Jun	Dec	Jun	Dec
Total	136,294	157,017	182,065	206,131	230,201	243,359	262,564	284,692	293,397
Total Fixed	79,994	81,764	84,521	86,575	88,317	89,945	92,511	93,986	96,032
aDSL	30,987	30,759	31,470	31,611	31,330	31,173	30,974	30,657	30,690
sDSL	225	191	167	159	148	139	132	117	108
Other Wireline ¹	719	755	795	778	795	770	796	769	772
Cable Modem	42,439	43,923	45,334	46,698	48,263	49,664	51,646	52,760	54,009
FTTP ²	3,980	4,441	4,993	5,477	5,898	6,300	6,733	7,250	7,745
Satellite	1,116	1,144	1,176	1,204	1,190	1,217	1,454	1,623	1,849
Fixed Wireless	527	551	587	649	693	682	777	810	858
Mobile Wireless ³	56,300	75,253	97,544	119,556	141,883	153,414	170,053	190,706	197,365

¹ Power Line and Other are summarized with Other Wireline to maintain firm confidentiality. No Power Line connections were reported after 2012. See Technical Notes at the end of the report for a description of Form 477 technology categories and other reporting requirements.

² Fiber to the premises.

Note: Some historical data have been revised. Figures may not sum to totals due to rounding.
Source: FCC Form 477, Part I.

Chart 6
Connections by Technology as of December 31, 2013

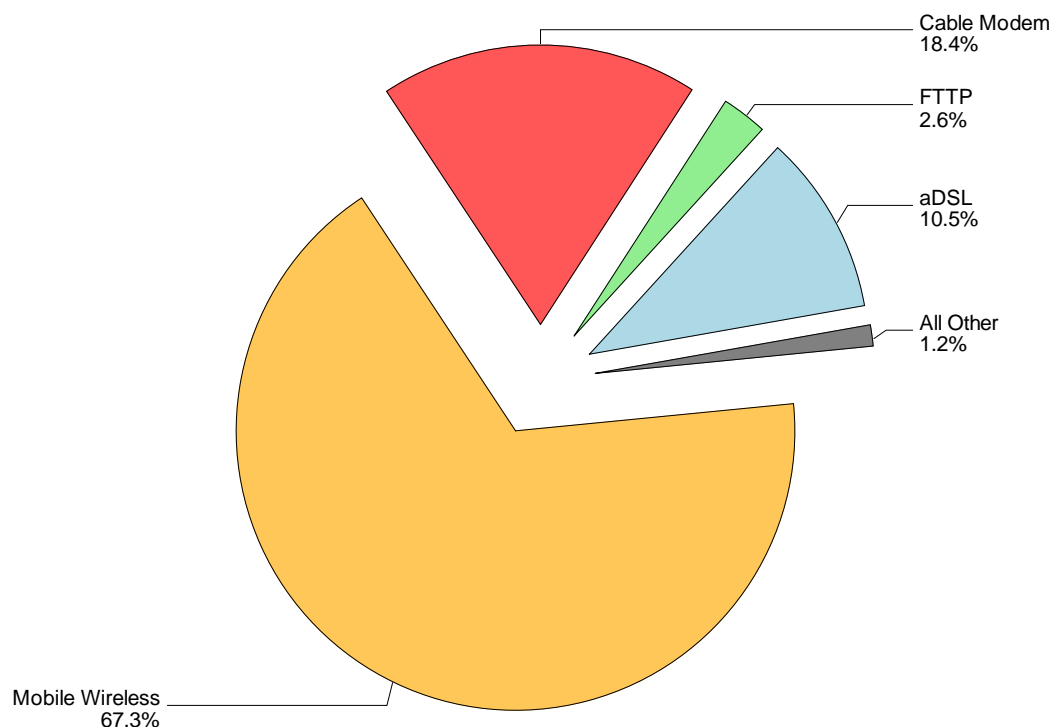


Table 6
Residential Connections over 200 kbps in at Least One Direction by Technology 2009-2013
(In thousands)

<i>Technology</i>	2009	2010		2011		2012		2013	
	<i>Dec</i>	<i>Jun</i>	<i>Dec</i>	<i>Jun</i>	<i>Dec</i>	<i>Jun</i>	<i>Dec</i>	<i>Jun</i>	<i>Dec</i>
Total	117,089	132,567	149,441	171,773	186,516	196,665	215,817	235,273	246,797
Total Fixed	73,394	75,251	76,918	78,906	80,706	82,217	84,392	85,277	87,599
aDSL	27,402	27,488	27,467	27,754	27,758	27,632	27,391	26,869	27,248
sDSL	85	65	53	52	54	49	50	43	39
Other Wireline ¹	56	61	76	45	40	14	34	22	22
Cable Modem	40,872	42,178	43,295	44,480	45,832	47,033	48,716	49,494	50,709
FTTP ²	3,758	4,185	4,704	5,118	5,521	5,892	6,270	6,732	7,176
Satellite	767	787	811	885	886	998	1,242	1,407	1,643
Fixed Wireless	454	486	513	572	616	600	689	710	763
Mobile Wireless ³	43,695	57,316	72,523	92,867	105,810	114,448	131,425	149,996	159,197

¹ Power Line and Other are summarized with Other Wireline to maintain firm confidentiality. No Power Line connections were reported after 2012. See Technical Notes at the end of the report for a description of Form 477 technology categories and other reporting requirements.

² Fiber to the premises.

Note: Some historical data have been revised. Figures may not sum to totals due to rounding.
Source: FCC Form 477, Part I.

Chart 7
Residential Connections by Technology as of December 31, 2013

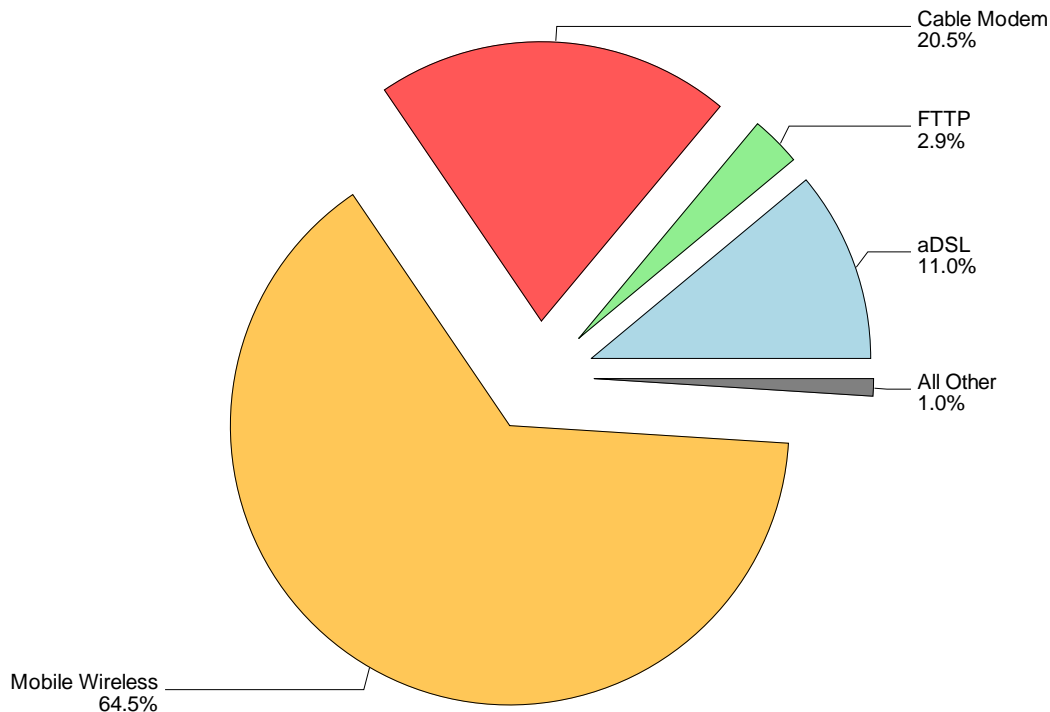


Table 7
Connections at Least 3 Mbps Downstream and 768 kbps Upstream by Technology 2009-2013
(In thousands)

<i>Technology</i>	2009	2010		2011		2012		2013	
	<i>Dec</i>	<i>Jun</i>	<i>Dec</i>	<i>Jun</i>	<i>Dec</i>	<i>Jun</i>	<i>Dec</i>	<i>Jun</i>	<i>Dec</i>
Total	40,669	45,552	55,110	64,819	82,015	100,268	129,398	165,110	211,218
Total Fixed	38,963	41,364	44,694	48,577	51,097	57,243	64,657	68,673	78,175
aDSL	6,389	6,275	7,302	8,909	10,351	12,875	13,108	14,233	18,540
sDSL	19	13	14	16	26	30	33	34	36
Other Wireline ¹	150	177	211	204	228	239	276	284	308
Cable Modem	28,583	30,616	32,338	34,113	34,699	37,798	44,133	46,014	50,236
FTTP ²	3,739	4,192	4,725	5,188	5,606	6,001	6,430	6,981	7,486
Satellite	#	#	#	#	#	87	394	791	1,181
Fixed Wireless	82	92	105	145	186	214	284	337	388
Mobile Wireless	1,706	4,188	10,416	16,242	30,918	43,025	64,741	96,437	133,043

= Rounds to Zero.

¹ Power Line and Other are summarized with Other Wireline to maintain firm confidentiality. No Power Line connections were reported after 2012. See Technical Notes at the end of the report for a description of Form 477 technology categories and other reporting requirements.

² Fiber to the premises.

Note: Some historical data have been revised. Figures may not sum to totals due to rounding.

Source: FCC Form 477, Part I.

Chart 8
Connections at Least 3 Mbps Downstream and 768 kbps Upstream
by Technology as of December 31, 2013

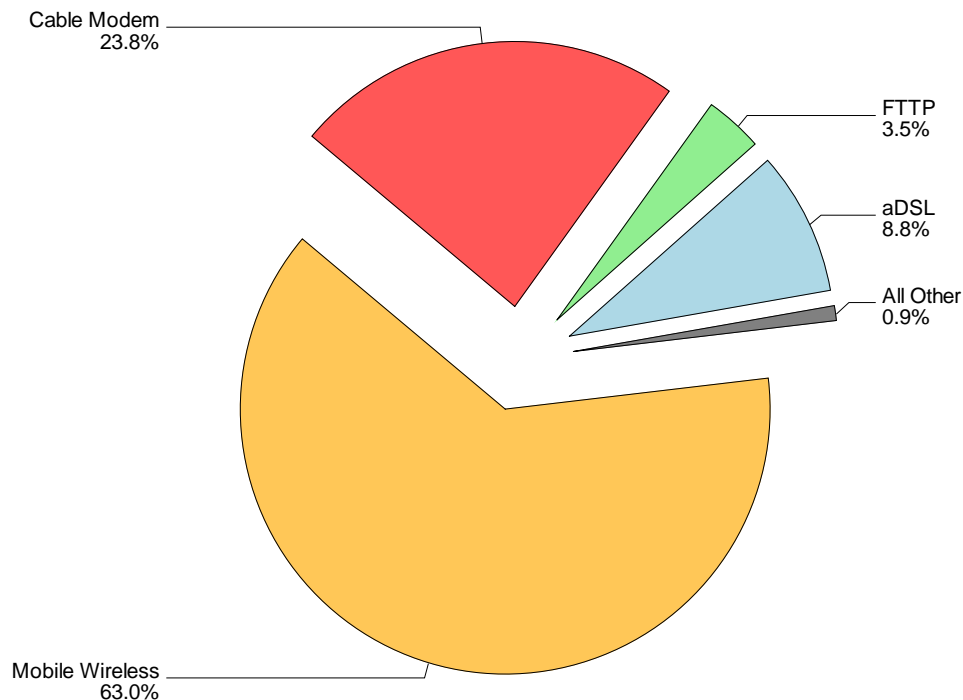


Table 8
Residential Connections at Least 3 Mbps Downstream and 768 kbps Upstream by Technology 2009-2013
(In thousands)

<i>Technology</i>	2009	2010		2011		2012		2013	
	<i>Dec</i>	<i>Jun</i>	<i>Dec</i>	<i>Jun</i>	<i>Dec</i>	<i>Jun</i>	<i>Dec</i>	<i>Jun</i>	<i>Dec</i>
Total	38,426	42,243	47,632	51,783	63,736	78,609	105,749	137,792	179,840
Total Fixed	36,844	39,037	41,769	45,263	47,427	53,070	59,914	63,342	72,476
aDSL	5,633	5,557	6,421	7,909	9,274	11,563	11,669	12,666	16,715
sDSL	10	2	2	4	12	12	13	13	13
Other Wireline ¹	19	20	36	15	16	7	20	21	20
Cable Modem	27,548	29,398	30,742	32,321	32,693	35,583	41,561	43,061	47,258
FTTP ²	3,566	3,982	4,482	4,894	5,271	5,632	6,012	6,504	6,958
Satellite	0	0	0	0	#	86	393	788	1,177
Fixed Wireless	68	77	86	121	161	185	245	289	335
Mobile Wireless	1,582	3,206	5,863	6,520	16,309	25,539	45,835	74,450	107,364

= Rounds to Zero.

¹ Power Line and Other are summarized with Other Wireline to maintain firm confidentiality. No Power Line connections were reported after 2012. See Technical Notes at the end of the report for a description of Form 477 technology categories and other reporting requirements.

² Fiber to the premises.

Note: Some historical data have been revised. Figures may not sum to totals due to rounding.

Source: FCC Form 477, Part I.

Chart 9
Residential Connections at Least 3 Mbps Downstream and 768 kbps Upstream
by Technology as of December 31, 2013

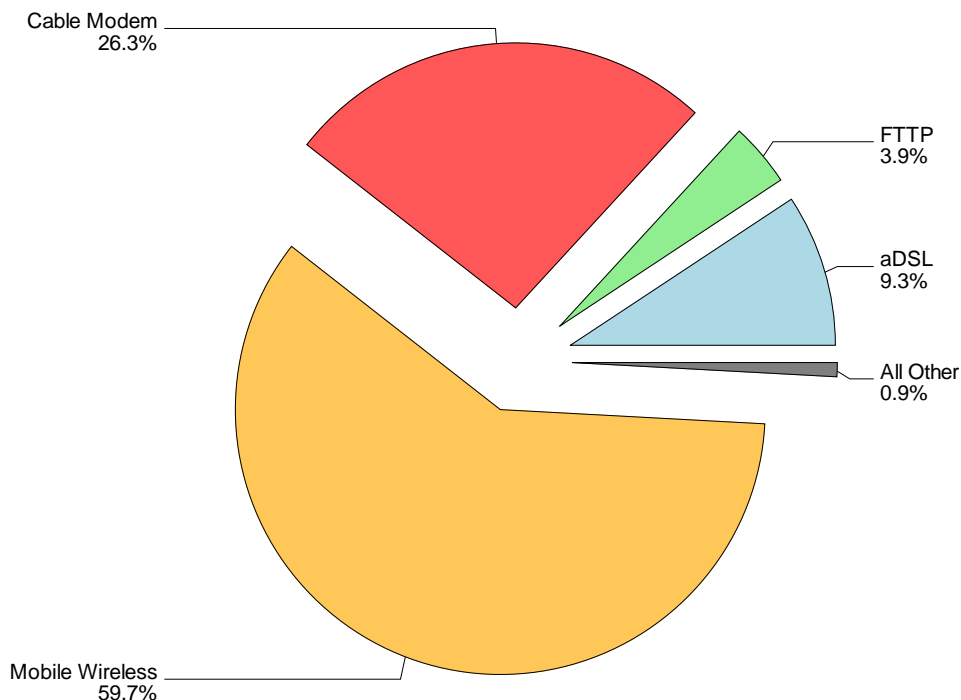


Chart 10
Residential Fixed Connections over 200 kbps in at Least One Direction 2009-2013
 (Shares of selected technologies)

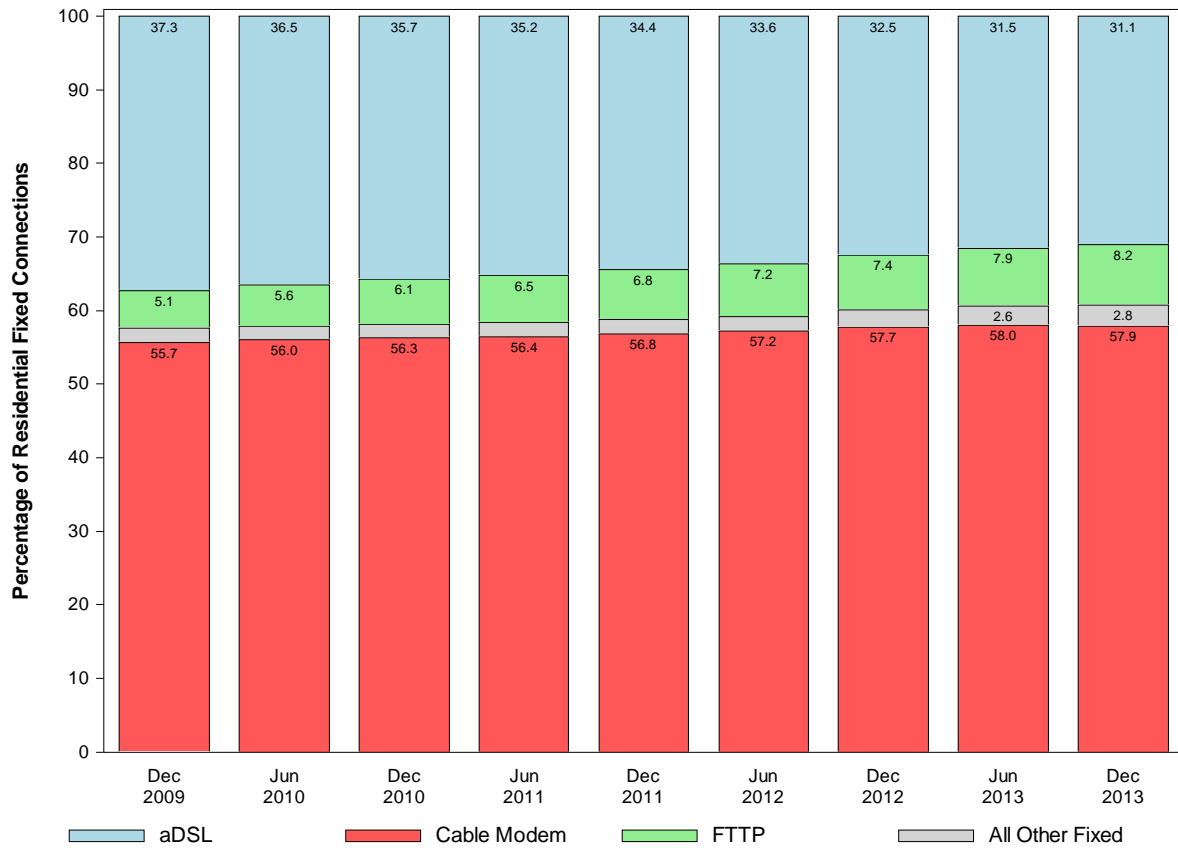


Chart 11
Residential Fixed Connections over 200 kbps in at Least One Direction 2009-2013
 (Net adds for selected technologies)

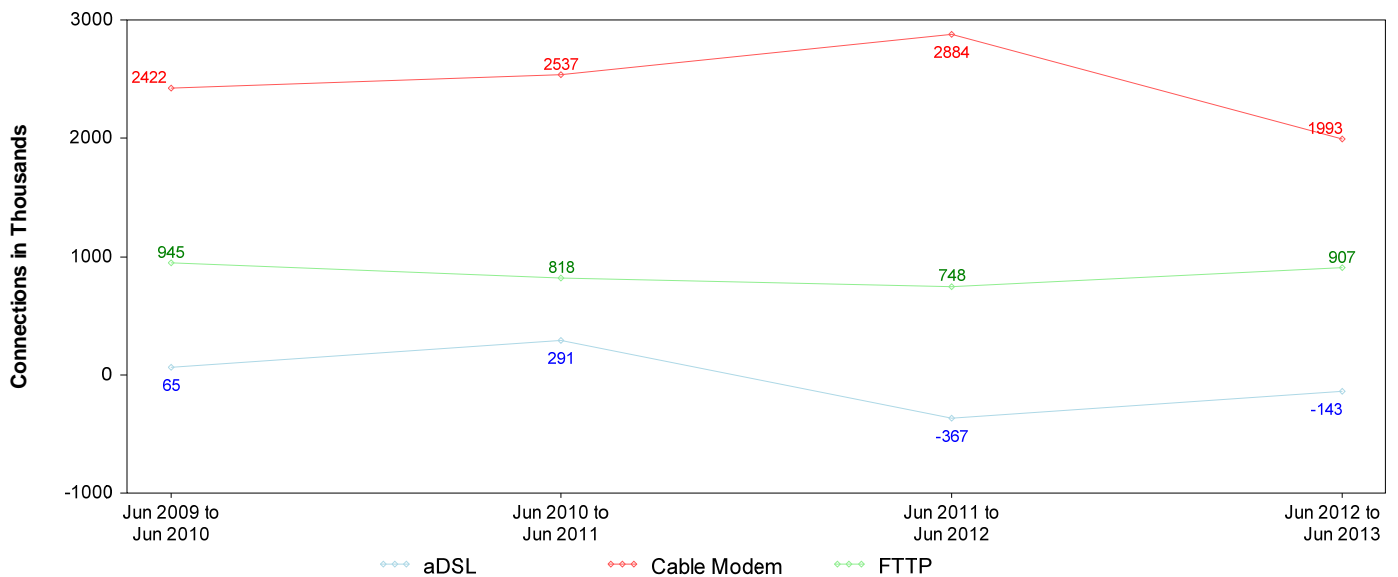


Chart 12
Residential Fixed Connections by Technology as of December 31, 2013
(Shares of selected technologies for selected speeds, connections in thousands)

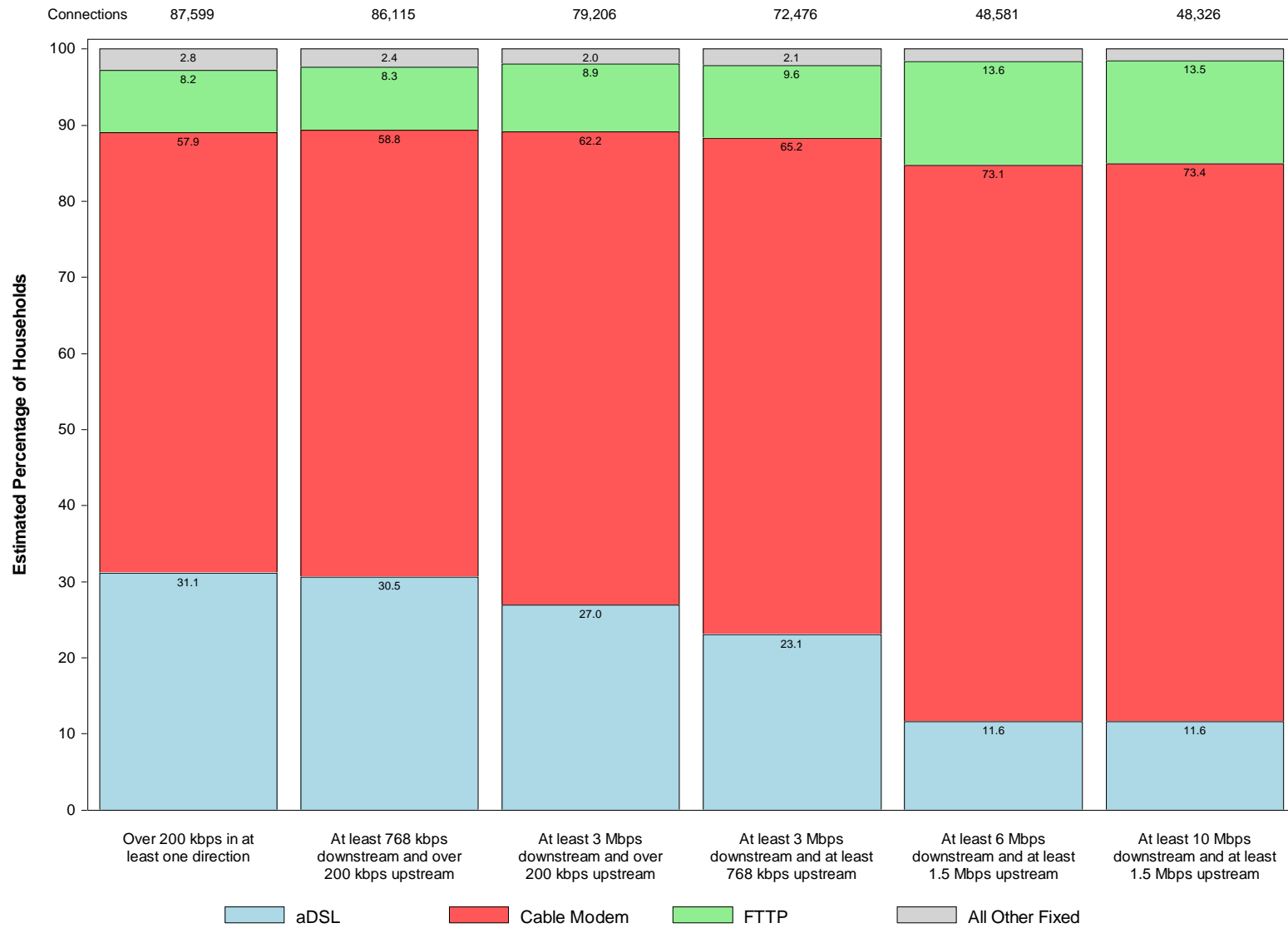


Table 9
Residential Connections by Technology and Speed (BTOP/BIP Definition)
as of December 31, 2013
(In thousands)

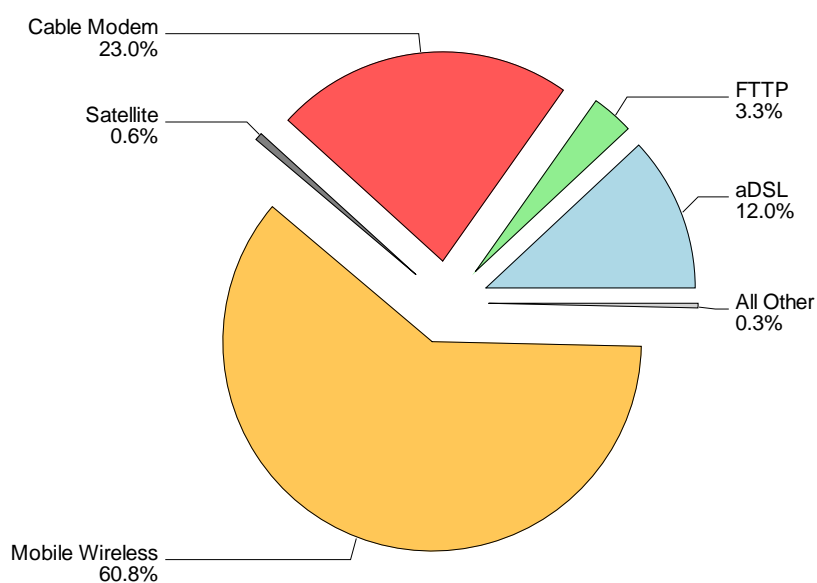
<i>Technology</i>	<i>At Most 200 kbps Upstream or less than 768 kbps Downstream</i>	<i>Over 200 kbps Upstream and at least 768 kbps Downstream</i>	<i>Total</i>
aDSL	943	26,305	27,248
sDSL	7	32	39
Other Wireline	#	22	22
Cable Modem	114	50,595	50,709
FTTP	9	7,168	7,176
Satellite	344	1,298	1,643
Fixed Wireless	67	696	763
Mobile Wireless	25,490	133,708	159,197
Total	26,974	219,823	246,797

= Rounds to Zero.

Note: Figures may not sum to totals due to rounding.

Source: FCC Form 477, Parts I and VI.

Chart 13
Residential Connections (BTOP/BIP Definition) by Technology
as of December 31, 2013



Note: The BTOP/BIP definition is advertised speeds of at least 768 kbps downstream and 200 kbps upstream to end users.

Source: FCC Form 477, Parts I and VI.

Table 10
Connections by Downstream Speed Tier and Technology as of December 31, 2013
(In thousands)

Technology	Downstream Speed								Total
	Greater than 200 kbps and less than 768 kbps	At least 768 kbps and less than 1.5 Mbps	At least 1.5 Mbps and less than 3 Mbps	At least 3 Mbps and less than 6 Mbps	At least 6 Mbps and less than 10 Mbps	At least 10 Mbps and less than 25 Mbps	At least 25 Mbps and less than 100 Mbps	At least 100 Mbps	
aDSL	407	2,277	3,948	8,738	6,212	8,834	273	2	30,690
sDSL	21	32	19	*	*	*	4	#	108
Other Wireline	35	38	391	113	29	68	57	40	772
Cable Modem	100	903	574	3,939	1,630	19,096	27,240	527	54,009
FTTP	11	84	97	286	197	4,021	2,864	185	7,745
Satellite	215	285	159	*	*	*	0	0	1,849
Fixed Wireless	58	133	242	275	79	67	4	1	858
Mobile Wireless	31,232	3,899	23,676	55,128	25,803	49,167	8,460	0	197,365
Total	32,079	7,651	29,106	68,815	33,954	82,135	38,901	756	293,397

Percentages									
aDSL	0.1	0.8	1.3	3.0	2.1	3.0	0.1	0.0	10.5
sDSL	0.0	0.0	0.0	*	*	*	0.0	0.0	0.0
Other Wireline	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.3
Cable Modem	0.0	0.3	0.2	1.3	0.6	6.5	9.3	0.2	18.4
FTTP	0.0	0.0	0.0	0.1	0.1	1.4	1.0	0.1	2.6
Satellite	0.1	0.1	0.1	*	*	*	0.0	0.0	0.6
Fixed Wireless	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.3
Mobile Wireless	10.6	1.3	8.1	18.8	8.8	16.8	2.9	0.0	67.3
Total	10.9	2.6	9.9	23.5	11.6	28.0	13.3	0.3	100.0

= Rounds to Zero.

* = Data withheld to maintain firm confidentiality.

Note: Figures may not sum to totals due to rounding.

Source: FCC Form 477, Part I.

Table 11
Residential Connections by Downstream Speed Tier and Technology as of December 31, 2013
(In thousands)

Technology	Downstream Speed								Total
	Greater than 200 kbps and less than 768 kbps	At least 768 kbps and less than 1.5 Mbps	At least 1.5 Mbps and less than 3 Mbps	At least 3 Mbps and less than 6 Mbps	At least 6 Mbps and less than 10 Mbps	At least 10 Mbps and less than 25 Mbps	At least 25 Mbps and less than 100 Mbps	At least 100 Mbps	
aDSL	357	2,150	3,386	7,665	5,194	8,237	258	1	27,248
sDSL	7	16	2	*	*	*	3	0	39
Other Wireline	#	#	1	4	3	9	1	3	22
Cable Modem	88	877	497	3,692	1,085	17,488	26,513	468	50,709
FTTP	8	77	71	252	180	3,794	2,682	112	7,176
Satellite	86	252	123	*	*	*	0	0	1,643
Fixed Wireless	54	120	219	241	68	59	2	#	763
Mobile Wireless	24,379	3,736	19,123	46,823	16,168	41,109	7,859	0	159,197
Total	24,981	7,228	23,423	58,993	22,699	71,569	37,318	585	246,797

Percentages									
aDSL	0.1	0.9	1.4	3.1	2.1	3.3	0.1	0.0	11.0
sDSL	0.0	0.0	0.0	*	*	*	0.0	0.0	0.0
Other Wireline	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cable Modem	0.0	0.4	0.2	1.5	0.4	7.1	10.7	0.2	20.5
FTTP	0.0	0.0	0.0	0.1	0.1	1.5	1.1	0.0	2.9
Satellite	0.0	0.1	0.0	*	*	*	0.0	0.0	0.7
Fixed Wireless	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.3
Mobile Wireless	9.9	1.5	7.7	19.0	6.6	16.7	3.2	0.0	64.5
Total	10.1	2.9	9.5	23.9	9.2	29.0	15.1	0.2	100.0

= Rounds to Zero.

* = Data withheld to maintain firm confidentiality.

Note: Figures may not sum to totals due to rounding.

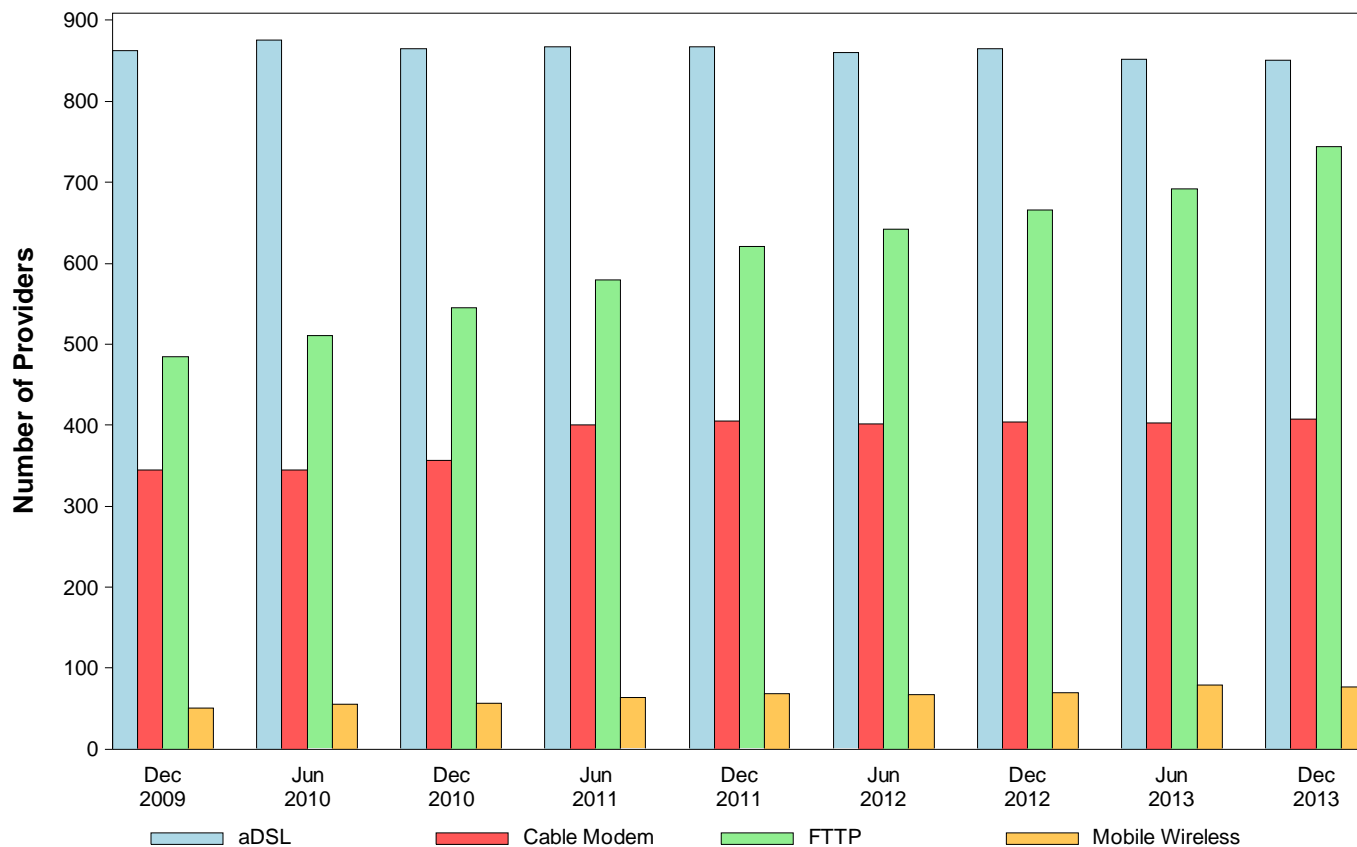
Source: FCC Form 477, Part I.

Table 12
Nationwide Number of Providers of Connections over 200 kbps in at Least One Direction
by Technology 2009-2013

	2009		2010		2011		2012		2013	
Technology	Dec	Jun	Dec	Jun	Dec	Jun	Dec	Jun	Dec	
aDSL	862	875	865	867	867	860	865	852	851	
sDSL	261	251	247	252	255	251	255	246	239	
Other Wireline	274	267	270	265	274	258	262	246	245	
Cable Modem	345	345	357	400	405	401	404	403	407	
FTTP	485	510	545	579	621	642	666	692	744	
Satellite	4	4	4	5	6	5	6	5	5	
Fixed Wireless	607	625	646	672	713	713	765	771	825	
Mobile Wireless	51	55	57	64	69	67	70	79	77	
Power Line and Other	6	5	7	4	5	*	*	0	1	
Total	1,526	1,536	1,566	1,624	1,687	1,673	1,722	1,714	1,773	

Note: Some historical data have been revised. Multiple Form 477 filers within a holding company structure count as one provider. * = 1-3 providers.
Source: FCC Form 477, Part I.

Chart 14
Nationwide Number of Providers of Connections over 200 kbps in at Least One Direction
Selected Technologies 2009-2013



Detailed Summary Statistics: The States

Contents of this section

Residential subscribership rates

Table 13	Residential Fixed Connections at Least 3 Mbps Downstream / 768 kbps Upstream and Households by State as of December 31, 2013	34
Table 14	Residential Fixed Connections and Households by State as of December 31, 2013 (Connections over 200 kbps in at least one direction).....	35

End users of connections

Table 15	Connections by Type of End User by State as of December 31, 2013 (Connections over 200 kbps in at least one direction).....	36
----------	---	----

Connections by speed and technology

Table 16	Connections by Technology by State as of December 31, 2013 (Connections over 200 kbps in at least one direction).....	37
Table 17	Connections by Technology by State as of December 31, 2013 (Connections at least 3 mbps downstream and 768 kbps upstream)	39
Table 18	Percentage of Connections by Download Speed by State as of December 31, 2013 (Connections over 200 kbps in at least one direction).....	41

Connections for selected technologies

Table 19	ADSL Connections by State 2008-2012 (Connections over 200 kbps in at least one direction).....	43
Table 20	Cable Modem Connections by State 2008-2012 (Connections over 200 kbps in at least one direction).....	45

Number of providers

Table 21	Providers of Connections by Technology by State as of December 31, 2013 (Connections over 200 kbps in at least one direction).....	47
----------	--	----

Table 13
Residential Fixed Connections at Least 3 Mbps Downstream / 768 kbps Upstream
and Households by State as of December 31, 2013
(Connections and households, in thousands)

<i>State</i>	<i>Connections</i>	<i>Households</i>	<i>Subscribership Ratio</i>
Alabama	775	1,920	0.40
Alaska	127	269	0.47
American Samoa	0	9	0.00
Arizona	1,563	2,496	0.63
Arkansas	417	1,174	0.36
California	8,419	12,912	0.65
Colorado	1,409	2,054	0.69
Connecticut	947	1,387	0.68
Delaware	260	355	0.73
District of Columbia	192	276	0.69
Florida	4,835	7,733	0.63
Georgia	1,940	3,739	0.52
Guam	*	40	*
Hawaii	379	470	0.81
Idaho	291	605	0.48
Illinois	2,787	4,876	0.57
Indiana	1,334	2,542	0.52
Iowa	401	1,236	0.32
Kansas	593	1,130	0.52
Kentucky	853	1,753	0.49
Louisiana	736	1,744	0.42
Maine	376	561	0.67
Maryland	1,612	2,211	0.73
Massachusetts	2,037	2,575	0.79
Michigan	2,236	3,856	0.58
Minnesota	1,206	2,128	0.57
Mississippi	346	1,127	0.31
Missouri	1,130	2,413	0.47
Montana	192	420	0.46
Nebraska	432	734	0.59
Nevada	621	1,068	0.58
New Hampshire	402	525	0.77
New Jersey	2,607	3,250	0.80
New Mexico	376	818	0.46
New York	5,677	7,363	0.77
North Carolina	2,287	3,910	0.58
North Dakota	168	288	0.58
Northern Mariana Isl	*	11	*
Ohio	2,804	4,612	0.61
Oklahoma	652	1,497	0.44
Oregon	993	1,567	0.63
Pennsylvania	3,283	5,059	0.65
Puerto Rico	173	1,373	0.13
Rhode Island	307	413	0.74
South Carolina	1,033	1,871	0.55
South Dakota	191	330	0.58
Tennessee	1,271	2,567	0.50
Texas	5,233	9,383	0.56
Utah	609	923	0.66
Vermont	182	257	0.71
Virgin Islands	7	41	0.16
Virginia	2,071	3,155	0.66
Washington	1,845	2,723	0.68
West Virginia	434	767	0.57
Wisconsin	1,296	2,314	0.56
Wyoming	114	235	0.49
Total	72,476	121,061	0.60

= Rounds to Zero; * = Data withheld to maintain firm confidentiality.

Note: Figures may not sum to totals due to rounding.

Sources: FCC Form 477, Part VI (Connections); Geolytics 2013 Block-Level Estimates (Households for U.S. and District of Columbia); Census 2010 (Housing Units for Puerto Rico, American Samoa, Guam, Northern Mariana Islands and U.S. Virgin Islands).

Table 14
Residential Fixed Connections and Households by State as of December 31, 2013
(Connections over 200 kbps in at least one direction and households, in thousands)

<i>State</i>	<i>Connections</i>	<i>Households</i>	<i>Subscribership Ratio</i>
Alabama	1,145	1,920	0.60
Alaska	194	269	0.72
American Samoa	*	9	*
Arizona	1,830	2,496	0.73
Arkansas	645	1,174	0.55
California	10,115	12,912	0.78
Colorado	1,620	2,054	0.79
Connecticut	1,102	1,387	0.79
Delaware	284	355	0.80
District of Columbia	205	276	0.74
Florida	6,024	7,733	0.78
Georgia	2,516	3,739	0.67
Guam	*	40	*
Hawaii	393	470	0.84
Idaho	412	605	0.68
Illinois	3,450	4,876	0.71
Indiana	1,704	2,542	0.67
Iowa	839	1,236	0.68
Kansas	802	1,130	0.71
Kentucky	1,135	1,753	0.65
Louisiana	1,101	1,744	0.63
Maine	430	561	0.77
Maryland	1,707	2,211	0.77
Massachusetts	2,125	2,575	0.83
Michigan	2,672	3,856	0.69
Minnesota	1,534	2,128	0.72
Mississippi	570	1,127	0.51
Missouri	1,575	2,413	0.65
Montana	285	420	0.68
Nebraska	520	734	0.71
Nevada	747	1,068	0.70
New Hampshire	441	525	0.84
New Jersey	2,719	3,250	0.84
New Mexico	501	818	0.61
New York	5,955	7,363	0.81
North Carolina	2,819	3,910	0.72
North Dakota	215	288	0.75
Northern Mariana Isl	*	11	*
Ohio	3,384	4,612	0.73
Oklahoma	924	1,497	0.62
Oregon	1,144	1,567	0.73
Pennsylvania	3,759	5,059	0.74
Puerto Rico	564	1,373	0.41
Rhode Island	320	413	0.78
South Carolina	1,294	1,871	0.69
South Dakota	232	330	0.70
Tennessee	1,578	2,567	0.61
Texas	6,479	9,383	0.69
Utah	706	923	0.76
Vermont	208	257	0.81
Virgin Islands	23	41	0.57
Virginia	2,282	3,155	0.72
Washington	2,068	2,723	0.76
West Virginia	489	767	0.64
Wisconsin	1,618	2,314	0.70
Wyoming	160	235	0.68
Total	87,599	121,061	0.72

= Rounds to Zero; * = Data withheld to maintain firm confidentiality.

Note: Figures may not sum to totals due to rounding.

Sources: FCC Form 477, Part VI (Connections); Geolytics 2013 Block-Level Estimates (Households for U.S. and District of Columbia); Census 2010 (Housing Units for Puerto Rico, American Samoa, Guam, Northern Mariana Islands and U.S. Virgin Islands).

Table 15
Connections by Type of End User by State as of December 31, 2013
(Connections over 200 kbps in at least one direction, in thousands)

State	Connections		Percentages		Total
	Residential	Business	Residential	Business	
Alabama	3,345	478	87.5	12.5	3,823
Alaska	580	97	85.7	14.3	677
American Samoa	*	*	*	*	*
Arizona	4,815	819	85.5	14.5	5,634
Arkansas	1,997	341	85.4	14.6	2,338
California	32,677	6,065	84.3	15.7	38,742
Colorado	4,331	823	84.0	16.0	5,154
Connecticut	3,008	598	83.4	16.6	3,606
Delaware	758	139	84.5	15.5	897
District of Columbia	692	521	57.0	43.0	1,213
Florida	15,968	3,041	84.0	16.0	19,009
Georgia	7,475	1,385	84.4	15.6	8,860
Guam	67	11	86.1	13.9	78
Hawaii	1,190	177	87.0	13.0	1,367
Idaho	1,138	203	84.8	15.2	1,341
Illinois	9,934	2,019	83.1	16.9	11,952
Indiana	4,645	709	86.8	13.2	5,354
Iowa	2,009	360	84.8	15.2	2,369
Kansas	2,050	379	84.4	15.6	2,429
Kentucky	3,182	449	87.6	12.4	3,631
Louisiana	3,545	577	86.0	14.0	4,121
Maine	894	142	86.3	13.7	1,036
Maryland	4,851	885	84.6	15.4	5,737
Massachusetts	5,622	1,089	83.8	16.2	6,711
Michigan	7,173	1,632	81.5	18.5	8,805
Minnesota	4,017	884	82.0	18.0	4,902
Mississippi	2,083	178	92.1	7.9	2,261
Missouri	4,271	901	82.6	17.4	5,172
Montana	728	105	87.4	12.6	833
Nebraska	1,312	286	82.1	17.9	1,598
Nevada	2,243	357	86.3	13.7	2,600
New Hampshire	1,038	169	86.0	14.0	1,207
New Jersey	7,783	1,495	83.9	16.1	9,279
New Mexico	1,422	226	86.3	13.7	1,648
New York	16,108	3,193	83.5	16.5	19,300
North Carolina	7,025	1,320	84.2	15.8	8,346
North Dakota	568	108	84.1	15.9	676
Northern Mariana Isl	*	*	*	*	*
Ohio	8,695	1,628	84.2	15.8	10,323
Oklahoma	2,809	499	84.9	15.1	3,308
Oregon	3,039	538	85.0	15.0	3,577
Pennsylvania	9,742	1,697	85.2	14.8	11,439
Puerto Rico	2,188	216	91.0	9.0	2,404
Rhode Island	826	153	84.4	15.6	978
South Carolina	3,243	476	87.2	12.8	3,719
South Dakota	591	82	87.9	12.1	673
Tennessee	4,626	829	84.8	15.2	5,455
Texas	20,698	4,380	82.5	17.5	25,078
Utah	2,009	409	83.1	16.9	2,418
Vermont	450	86	84.0	16.0	536
Virgin Islands	83	9	89.8	10.2	93
Virginia	6,326	1,326	82.7	17.3	7,652
Washington	5,544	1,136	83.0	17.0	6,680
West Virginia	1,157	166	87.4	12.6	1,323
Wisconsin	3,786	742	83.6	16.4	4,529
Wyoming	431	66	86.7	13.3	497
Total	246,797	46,601	84.1	15.9	293,397

= Rounds to Zero.

* = Data withheld to maintain firm confidentiality.

Figures may not sum to totals due to rounding.

Source: FCC Form 477, Part I and VI.

Table 16
Connections by Technology by State as of December 31, 2013
(Connections over 200 kbps in at least one direction, in thousands)

<i>State</i>	<i>ADSL</i>	<i>SDSL</i>	<i>Other Wireline</i>	<i>Cable Modem</i>	<i>Fiber</i>	<i>Satellite</i>	<i>Fixed Wireless</i>	<i>Mobile Wireless</i>	<i>Total</i>
Alabama	527	4	*	648	11	*	4	2,561	3,823
Alaska	82	1	3	*	2	*	6	442	677
American Samoa	*	*	0	*	*	0	*	0	*
Arizona	649	#	*	1,253	6	*	20	3,662	5,634
Arkansas	350	#	*	324	11	*	3	1,601	2,338
California	4,205	11	*	5,735	830	*	46	27,656	38,742
Colorado	*	#	0	952	7	*	52	3,380	5,154
Connecticut	*	1	0	783	6	*	*	2,399	3,606
Delaware	*	#	0	181	*	*	*	589	897
District of Columbia	*	1	0	*	26	*	*	974	1,213
Florida	1,928	1	*	4,060	469	*	6	12,425	19,009
Georgia	1,223	2	*	1,420	43	*	1	6,083	8,860
Guam	*	*	*	*	*	0	*	*	78
Hawaii	*	*	0	*	9	*	*	942	1,367
Idaho	219	#	*	168	4	*	43	890	1,341
Illinois	1,470	6	*	2,145	26	*	54	8,171	11,952
Indiana	747	1	*	910	95	*	39	3,503	5,354
Iowa	386	1	*	413	62	*	29	1,447	2,369
Kansas	286	1	*	469	69	*	30	1,549	2,429
Kentucky	508	2	*	637	30	*	15	2,387	3,631
Louisiana	433	1	*	675	49	*	6	2,900	4,121
Maine	140	3	0	315	6	*	*	558	1,036
Maryland	*	2	0	912	*	*	1	3,883	5,737
Massachusetts	*	1	0	1,568	*	*	2	4,383	6,711
Michigan	904	6	*	1,835	13	*	38	5,900	8,805
Minnesota	631	14	*	914	49	*	23	3,228	4,902
Mississippi	300	#	*	280	3	*	1	1,624	2,261
Missouri	850	#	*	726	35	*	27	3,446	5,172
Montana	119	1	*	161	11	*	13	513	833
Nebraska	181	#	*	345	16	*	19	1,025	1,598

Table 16 - Continued
Connections by Technology by State as of December 31, 2013
(Connections over 200 kbps in at least one direction, in thousands)

<i>State</i>	<i>ADSL</i>	<i>SDSL</i>	<i>Other Wireline</i>	<i>Cable Modem</i>	<i>Fiber</i>	<i>Satellite</i>	<i>Fixed Wireless</i>	<i>Mobile Wireless</i>	<i>Total</i>
Nevada	257	#	0	*	5	*	8	1,786	2,600
New Hampshire	93	#	0	373	15	*	*	716	1,207
New Jersey	310	1	0	1,890	*	*	#	6,274	9,279
New Mexico	293	#	*	216	5	*	19	1,096	1,648
New York	723	6	0	4,525	*	*	2	12,725	19,300
North Carolina	1,071	#	*	1,886	47	*	3	5,271	8,346
North Dakota	70	1	*	123	40	*	4	431	676
Northern Mariana Isl	*	0	*	*	*	0	*	*	*
Ohio	1,205	3	*	2,279	70	*	32	6,664	10,323
Oklahoma	397	#	*	519	19	*	28	2,285	3,308
Oregon	364	1	*	747	86	*	18	2,327	3,577
Pennsylvania	943	3	0	2,390	*	*	4	7,336	11,439
Puerto Rico	*	0	0	*	*	*	*	1,773	2,404
Rhode Island	*	#	0	*	*	*	*	628	978
South Carolina	473	*	0	841	46	*	*	2,310	3,719
South Dakota	63	*	0	145	27	*	12	416	673
Tennessee	593	2	*	959	102	*	8	3,714	5,455
Texas	3,139	4	*	3,037	532	*	100	17,979	25,078
Utah	314	#	*	365	33	*	46	1,647	2,418
Vermont	99	*	0	118	9	*	*	298	536
Virgin Islands	*	0	*	*	*	*	*	66	93
Virginia	421	1	0	1,268	*	*	7	5,158	7,652
Washington	595	1	*	1,492	85	*	18	4,431	6,680
West Virginia	*	*	0	312	3	*	2	792	1,323
Wisconsin	663	11	*	968	35	*	33	2,769	4,529
Wyoming	62	#	*	95	3	*	12	314	497
Total	30,690	108	772	54,009	7,745	1,849	858	197,365	293,397

= Rounds to Zero.

* = Data withheld to maintain firm confidentiality.

Figures may not sum to totals due to rounding.

Source: FCC Form 477, Part I.

Table 17
Connections by Technology by State as of December 31, 2013
(Connections at least 3 Mbps downstream and 768 kbps upstream, in thousands)

<i>State</i>	<i>ADSL</i>	<i>SDSL</i>	<i>Other Wireline</i>	<i>Cable Modem</i>	<i>Fiber</i>	<i>Satellite</i>	<i>Fixed Wireless</i>	<i>Mobile Wireless</i>	<i>Total</i>
Alabama	236	#	*	550	10	*	1	1,755	2,596
Alaska	46	*	1	*	2	*	2	76	218
American Samoa	0	*	0	0	*	0	0	0	*
Arizona	488	*	7	1,122	5	*	10	2,308	3,954
Arkansas	173	*	2	245	8	*	1	1,136	1,597
California	2,521	3	*	5,486	811	*	29	18,916	27,897
Colorado	*	#	11	946	6	*	41	2,225	3,744
Connecticut	*	*	2	776	5	*	*	1,667	2,687
Delaware	*	*	1	*	*	*	0	398	679
District of Columbia	*	*	5	*	*	*	*	635	856
Florida	1,143	#	*	3,542	461	*	4	9,393	14,606
Georgia	648	#	*	1,355	36	*	#	4,287	6,375
Guam	*	*	*	*	*	0	*	*	50
Hawaii	*	*	#	*	9	*	*	677	1,085
Idaho	159	*	1	127	3	*	23	546	865
Illinois	925	3	*	1,998	24	*	28	5,741	8,762
Indiana	477	#	*	821	90	*	10	2,394	3,831
Iowa	219	#	*	153	46	*	15	846	1,299
Kansas	151	#	*	409	54	*	6	664	1,296
Kentucky	281	#	*	575	20	*	5	681	1,597
Louisiana	*	#	3	554	34	*	1	2,137	2,928
Maine	104	1	#	297	5	*	*	229	643
Maryland	*	*	7	896	*	*	1	2,609	4,344
Massachusetts	*	#	9	1,562	*	*	1	2,982	5,198
Michigan	580	2	*	1,711	12	*	17	4,012	6,399
Minnesota	397	10	*	831	37	*	5	2,257	3,561
Mississippi	110	*	1	235	2	*	1	783	1,165
Missouri	481	#	*	643	29	*	5	2,500	3,710
Montana	52	#	1	*	9	*	5	*	444
Nebraska	126	#	*	313	12	*	8	600	1,065

Table 17 - Continued
Connections by Technology by State as of December 31, 2013
(Connections at least 3 Mbps downstream and 768 kbps upstream, in thousands)

<i>State</i>	<i>ADSL</i>	<i>SDSL</i>	<i>Other Wireline</i>	<i>Cable Modem</i>	<i>Fiber</i>	<i>Satellite</i>	<i>Fixed Wireless</i>	<i>Mobile Wireless</i>	<i>Total</i>
Nevada	151	*	3	*	4	*	6	1,280	1,935
New Hampshire	59	#	*	363	14	*	0	446	887
New Jersey	199	#	13	1,882	*	*	#	4,308	7,163
New Mexico	185	#	2	209	3	*	3	*	905
New York	537	2	21	4,415	*	*	1	8,902	15,110
North Carolina	582	#	*	1,794	38	*	#	3,301	5,757
North Dakota	44	*	2	107	34	*	1	*	391
Northern Mariana Isl	*	0	0	0	*	0	*	*	*
Ohio	817	#	*	2,072	66	*	6	4,290	7,293
Oklahoma	192	*	1	440	15	*	12	1,738	2,437
Oregon	216	#	*	742	84	*	10	1,603	2,676
Pennsylvania	636	#	11	2,206	*	*	3	5,056	8,629
Puerto Rico	*	0	*	*	*	*	*	970	1,152
Rhode Island	*	*	1	*	*	*	*	426	759
South Carolina	247	#	*	794	37	*	#	1,449	2,556
South Dakota	46	*	#	132	25	*	2	*	379
Tennessee	281	2	*	945	96	*	1	2,342	3,716
Texas	2,066	1	*	2,807	504	*	51	13,475	19,077
Utah	216	#	*	360	32	*	43	1,140	1,796
Vermont	73	*	#	117	8	*	*	*	291
Virgin Islands	*	0	*	*	*	0	*	*	15
Virginia	258	#	11	1,223	*	*	3	3,289	5,525
Washington	378	#	*	1,484	82	*	6	3,165	5,146
West Virginia	*	*	#	282	2	*	2	168	635
Wisconsin	387	3	*	927	27	*	6	1,880	3,263
Wyoming	30	*	1	89	3	*	4	*	272
Total	18,540	36	308	50,236	7,486	1,181	388	133,043	211,218

= Rounds to Zero.

* = Data withheld to maintain firm confidentiality.

Figures may not sum to totals due to rounding.

Source: FCC Form 477, Part I.

Table 18
Percentage of Connections by Downstream Speed by State as of December 31, 2013
(Connections over 200 kbps in at least one direction)

State	Over 200 kbps Upstream and				
	% over 200 kbps Downstream	% at least 768 kbps Downstream	% at least 3 Mbps Downstream	% at least 6 Mbps Downstream	% at least 10 Mbps Downstream
Alabama	97.5	85.5	77.0	48.6	39.4
Alaska	88.0	86.2	35.9	28.0	18.6
American Samoa	*	*	*	*	*
Arizona	97.8	84.7	72.4	56.9	47.3
Arkansas	97.8	88.8	78.0	31.1	24.9
California	97.8	89.8	76.6	49.1	38.3
Colorado	98.0	87.2	74.9	55.1	45.3
Connecticut	98.3	87.2	79.9	73.8	44.1
Delaware	97.7	85.9	79.5	58.2	50.9
District of Columbia	96.8	81.8	72.3	54.9	36.4
Florida	98.4	93.0	83.0	58.0	44.3
Georgia	97.6	86.9	78.4	71.3	41.2
Guam	100.0	100.0	63.7	45.5	41.7
Hawaii	98.9	91.2	81.8	50.1	37.3
Idaho	96.0	81.1	69.5	49.8	40.5
Illinois	98.1	89.8	78.8	50.9	39.1
Indiana	97.7	87.5	78.1	47.5	39.1
Iowa	97.8	85.5	67.2	46.8	39.0
Kansas	96.4	87.0	57.9	48.9	37.7
Kentucky	97.5	90.5	48.0	37.2	28.8
Louisiana	97.4	91.1	80.8	37.1	27.8
Maine	97.3	87.7	62.8	47.5	42.4
Maryland	97.7	86.9	77.4	55.8	48.2
Massachusetts	98.1	85.8	79.1	74.0	50.9
Michigan	97.7	87.7	76.6	56.7	45.3
Minnesota	97.8	87.1	77.0	56.5	45.3
Mississippi	98.2	74.4	61.6	27.6	20.7
Missouri	98.0	92.8	79.9	43.8	31.0
Montana	94.4	76.1	56.0	50.8	47.0
Nebraska	96.9	80.0	68.6	53.9	44.2

Table 18 - Continued
Percentage of Connections by Downstream Speed by State as of December 31, 2013
 (Connections over 200 kbps in at least one direction)

State	Over 200 kbps Upstream and				
	% over 200 kbps Downstream	% at least 768 kbps Downstream	% at least 3 Mbps Downstream	% at least 6 Mbps Downstream	% at least 10 Mbps Downstream
Nevada	98.6	91.7	79.3	49.7	38.1
New Hampshire	97.0	81.5	75.2	59.0	54.2
New Jersey	97.7	85.3	78.8	58.3	52.1
New Mexico	97.3	83.2	56.8	51.7	42.5
New York	98.0	87.2	79.8	60.5	51.5
North Carolina	97.7	84.4	73.7	55.2	46.2
North Dakota	97.5	82.1	61.3	54.8	50.9
Northern Mariana Isl	*	*	*	*	*
Ohio	97.2	84.0	74.3	54.8	45.4
Oklahoma	98.5	95.2	82.7	32.9	23.8
Oregon	98.1	88.5	77.9	52.4	44.2
Pennsylvania	97.5	86.6	78.3	52.3	44.9
Puerto Rico	99.6	94.2	56.7	22.5	13.6
Rhode Island	98.1	87.3	79.1	73.0	51.5
South Carolina	97.5	83.2	73.7	56.3	48.6
South Dakota	97.2	81.6	58.0	53.2	47.9
Tennessee	97.2	83.3	73.2	66.4	41.7
Texas	98.5	93.3	81.8	47.5	33.1
Utah	98.3	88.3	77.4	55.4	43.7
Vermont	96.8	85.4	55.1	45.6	38.8
Virgin Islands	99.2	94.5	19.4	9.1	0.2
Virginia	97.6	85.6	74.2	52.8	46.1
Washington	98.0	89.0	80.5	54.4	46.1
West Virginia	97.6	93.1	49.8	32.3	27.4
Wisconsin	98.0	90.3	76.4	48.9	39.7
Wyoming	96.8	79.4	57.7	53.3	49.2
Total	97.8	88.2	76.5	53.1	41.5

* = Data withheld to maintain firm confidentiality.
 Source: FCC Form 477, Part I.

Table 19
ADSL Connections by State 2009-2013
(Connections over 200 kbps in at least one direction, in thousands)

State	2009	2010		2011		2012		2013	
	Dec	Jun	Dec	Jun	Dec	Jun	Dec	Jun	Dec
Alabama	496	498	523	536	538	546	546	536	527
Alaska	77	77	78	79	77	78	79	81	82
American Samoa	*	*	*	*	*	*	*	*	*
Arizona	518	527	552	557	589	597	620	623	649
Arkansas	308	314	330	337	343	344	345	344	350
California	4,568	4,456	4,538	4,471	4,416	4,370	4,285	4,194	4,205
Colorado	651	658	663	*	*	*	*	*	*
Connecticut	*	*	*	*	*	*	*	*	*
Delaware	*	*	*	*	*	*	*	*	*
District of Columbia	*	*	*	*	*	*	*	*	*
Florida	1,988	2,006	2,070	2,104	1,998	1,955	1,977	1,918	1,928
Georgia	1,256	1,129	1,413	1,435	1,282	1,291	1,300	1,273	1,223
Guam	*	*	*	*	*	*	*	*	*
Hawaii	*	*	*	*	*	*	*	*	*
Idaho	174	177	181	185	190	200	208	214	219
Illinois	1,556	1,537	1,577	1,576	1,549	1,519	1,504	1,477	1,470
Indiana	721	725	754	763	765	760	754	742	747
Iowa	362	373	376	381	388	392	394	387	386
Kansas	260	264	271	273	275	275	278	279	286
Kentucky	454	459	473	481	501	502	507	503	508
Louisiana	404	397	396	407	437	444	446	443	433
Maine	125	126	125	134	136	139	140	143	140
Maryland	405	*	350	*	*	*	*	*	*
Massachusetts	*	*	*	*	*	*	*	*	*
Michigan	857	860	902	922	906	909	907	906	904
Minnesota	590	611	618	629	622	626	631	637	631
Mississippi	255	240	263	267	299	306	313	308	300
Missouri	805	811	846	862	870	864	863	852	850
Montana	115	119	119	123	122	122	121	121	119
Nebraska	164	167	169	173	175	175	175	174	181

Table 19 - Continued
ADSL Connections by State 2009-2013
(Connections over 200 kbps in at least one direction, in thousands)

State	2009	2010		2011		2012		2013	
	Dec	Jun	Dec	Jun	Dec	Jun	Dec	Jun	Dec
Nevada	229	232	242	245	250	255	255	255	255
New Hampshire	86	84	85	87	88	89	91	94	91
New Jersey	568	530	486	449	415	387	346	335	346
New Mexico	250	259	266	271	277	283	289	291	289
New York	1,046	1,010	957	928	875	841	777	761	777
North Carolina	969	985	995	1,026	1,050	1,059	1,063	1,076	1,063
North Dakota	67	67	69	71	71	71	73	72	73
Northern Mariana Isl	*	*	*	*	*	*	*	*	*
Ohio	1,127	1,145	1,177	1,190	1,184	1,175	1,178	1,184	1,178
Oklahoma	359	361	379	384	387	391	393	386	393
Oregon	367	362	359	360	363	373	370	364	370
Pennsylvania	1,232	1,202	1,159	1,131	1,098	1,063	1,017	994	1,017
Puerto Rico	*	*	*	*	*	*	*	*	*
Rhode Island	*	*	*	*	*	*	*	*	*
South Carolina	428	437	434	452	471	477	477	471	477
South Dakota	58	60	58	60	63	64	65	64	65
Tennessee	559	570	557	576	593	603	607	597	607
Texas	2,784	2,797	2,898	2,943	2,952	2,967	2,983	2,962	2,983
Utah	309	312	311	309	309	313	315	314	315
Vermont	81	84	85	87	94	97	98	100	98
Virgin Islands	*	*	*	*	*	*	*	*	*
Virginia	536	527	507	498	486	471	453	439	453
Washington	593	589	582	583	590	597	589	592	589
West Virginia	161	162	*	*	*	*	*	*	*
Wisconsin	612	615	646	658	657	651	651	648	651
Wyoming	58	59	59	59	61	62	62	62	62
Total	30,987	30,759	31,470	31,611	31,330	31,173	30,974	30,657	30,974

= Rounds to Zero.

* = Data withheld to maintain firm confidentiality.

Note: Some historical data have been revised. Figures may not sum to totals due to rounding.

Source: FCC Form 477, Part I.

Table 20
Cable Modem Connections by State 2009-2013
(Connections over 200 kbps in at least one direction, in thousands)

State	2009	2010		2011		2012		2013	
	Dec	Jun	Dec	Jun	Dec	Jun	Dec	Jun	Dec
Alabama	497	513	539	556	576	592	615	630	648
Alaska	*	*	*	*	*	*	*	*	*
American Samoa	0	0	*	*	*	*	*	*	*
Arizona	1,104	1,096	1,161	1,104	1,169	1,156	1,210	1,188	1,253
Arkansas	262	267	278	288	301	308	313	320	324
California	4,224	4,418	4,639	4,853	5,034	5,222	5,413	5,578	5,735
Colorado	709	744	787	817	848	870	899	925	952
Connecticut	640	672	673	713	723	744	761	774	783
Delaware	*	158	156	164	*	*	174	182	181
District of Columbia	*	*	*	*	*	*	*	*	*
Florida	2,992	3,076	3,292	3,313	3,549	3,557	3,803	3,830	4,060
Georgia	1,022	1,052	1,114	1,151	1,190	1,245	1,291	1,358	1,420
Guam	*	*	*	*	*	*	*	*	*
Hawaii	*	*	*	*	*	*	*	*	*
Idaho	133	137	145	150	158	160	161	163	168
Illinois	1,577	1,630	1,696	1,768	1,857	1,936	2,020	2,100	2,145
Indiana	669	697	728	766	801	835	868	897	910
Iowa	360	376	389	395	397	403	407	415	413
Kansas	435	434	441	447	456	455	468	467	469
Kentucky	497	512	530	565	597	614	637	647	637
Louisiana	559	562	586	593	612	625	644	655	675
Maine	237	259	269	286	282	300	297	313	315
Maryland	768	778	773	797	826	842	873	888	912
Massachusetts	1,250	1,339	1,343	1,401	1,415	1,454	1,503	1,566	1,568
Michigan	1,451	1,517	1,537	1,603	1,643	1,687	1,756	1,807	1,835
Minnesota	701	739	776	800	820	846	874	894	914
Mississippi	232	241	246	258	263	271	273	277	280
Missouri	586	599	604	617	623	653	688	706	726
Montana	108	113	119	127	*	*	150	154	161
Nebraska	295	293	309	316	324	331	338	345	345

Table 20 - Continued
Cable Modem Connections by State 2009-2013
(Connections over 200 kbps in at least one direction, in thousands)

State	2009	2010		2011		2012		2013	
	Dec	Jun	Dec	Jun	Dec	Jun	Dec	Jun	Dec
Nevada	*	*	*	*	*	*	*	*	*
New Hampshire	303	329	325	340	342	354	358	370	373
New Jersey	1,623	1,698	1,702	1,759	1,775	1,830	1,847	1,886	1,890
New Mexico	158	168	176	190	193	198	203	211	216
New York	3,886	3,982	4,013	4,091	4,116	4,253	4,457	4,509	4,525
North Carolina	1,444	1,513	1,554	1,566	1,653	1,729	1,851	1,905	1,886
North Dakota	93	90	101	96	108	111	116	118	123
Northern Mariana Isl	*	*	*	*	*	*	*	*	*
Ohio	1,813	1,862	1,895	1,943	2,025	2,057	2,171	2,103	2,279
Oklahoma	432	436	468	474	487	490	502	508	519
Oregon	542	576	608	640	662	683	711	731	747
Pennsylvania	1,835	1,915	1,983	2,057	2,135	2,200	2,286	2,362	2,390
Puerto Rico	*	*	*	*	*	*	*	*	*
Rhode Island	*	*	*	*	*	*	*	*	*
South Carolina	598	627	660	664	691	730	780	816	841
South Dakota	127	118	134	124	138	141	143	144	145
Tennessee	751	784	795	824	853	881	911	938	959
Texas	2,383	2,456	2,459	2,577	2,686	2,804	2,888	2,962	3,037
Utah	253	268	283	303	316	325	339	352	365
Vermont	83	93	97	104	106	109	113	115	118
Virgin Islands	0	0	0	0	*	*	*	*	*
Virginia	1,105	1,114	1,124	1,141	1,154	1,187	1,238	1,242	1,268
Washington	1,106	1,186	1,239	1,296	1,329	1,362	1,400	1,461	1,492
West Virginia	226	220	255	274	285	297	306	308	312
Wisconsin	802	823	846	870	897	914	948	958	968
Wyoming	74	76	80	82	85	89	92	94	95
Total	42,439	43,923	45,334	46,698	48,263	49,664	51,646	52,760	54,009

= Rounds to Zero.

* = Data withheld to maintain firm confidentiality.

Note: Some historical data have been revised. Figures may not sum to totals due to rounding.

Source: FCC Form 477, Part I.

Table 21
Providers of Connections by Technology by State as of December 31, 2013
(Connections over 200 kbps in at least one direction)

<i>State</i>	<i>ADSL</i>	<i>SDSL</i>	<i>Other Wireline</i>	<i>Cable Modem</i>	<i>Fiber</i>	<i>Satellite</i>	<i>Fixed Wireless</i>	<i>Mobile Wireless</i>	<i>Power Line and Other</i>	<i>Total</i>
Alabama	26	10	22	22	30	*	15	7	0	78
Alaska	13	4	9	4	7	4	8	8	*	27
American Samoa	*	*	0	*	*	0	*	0	0	*
Arizona	23	5	32	12	26	4	26	7	0	78
Arkansas	22	6	18	16	17	*	10	5	0	61
California	38	18	53	26	33	*	52	8	0	138
Colorado	39	11	37	17	29	*	37	11	0	104
Connecticut	9	10	24	7	12	*	*	4	0	40
Delaware	6	5	18	4	8	*	*	5	0	33
District of Columbia	10	7	22	*	12	*	*	5	0	36
Florida	29	14	47	19	37	*	19	5	0	99
Georgia	33	14	41	32	44	*	11	6	0	103
Guam	*	*	*	*	*	0	*	*	0	6
Hawaii	4	4	10	*	8	*	*	5	0	23
Idaho	23	4	20	14	26	*	18	7	0	62
Illinois	63	23	51	17	42	*	58	10	0	160
Indiana	40	13	31	12	42	*	42	7	0	105
Iowa	122	25	23	42	95	*	74	21	0	206
Kansas	35	13	23	26	42	*	33	10	0	98
Kentucky	23	7	23	27	31	*	20	9	0	91
Louisiana	16	8	25	18	22	*	9	6	0	64
Maine	13	10	18	5	14	*	*	5	0	33
Maryland	19	11	34	13	19	*	11	7	0	72
Massachusetts	14	13	31	11	14	*	6	4	0	56
Michigan	40	19	38	22	38	*	35	7	0	113
Minnesota	49	17	30	15	49	*	38	6	0	111
Mississippi	16	4	22	13	14	*	6	6	0	52
Missouri	37	14	32	21	37	*	45	10	0	116
Montana	21	8	16	8	15	*	19	4	0	53
Nebraska	32	8	14	20	32	*	30	8	0	79

Table 21 - Continued
Providers of Connections by Technology by State as of December 31, 2013
(Connections over 200 kbps in at least one direction)

<i>State</i>	<i>ADSL</i>	<i>SDSL</i>	<i>Other Wireline</i>	<i>Cable Modem</i>	<i>Fiber</i>	<i>Satellite</i>	<i>Fixed Wireless</i>	<i>Mobile Wireless</i>	<i>Power Line and Other</i>	<i>Total</i>
Nevada	17	11	26	8	18	*	13	6	0	64
New Hampshire	13	9	19	5	15	*	*	5	0	37
New Jersey	22	12	41	8	20	*	4	5	0	59
New Mexico	24	10	21	8	15	*	19	8	0	60
New York	45	20	45	23	33	*	16	5	0	102
North Carolina	24	9	28	20	32	*	12	9	0	79
North Dakota	27	9	16	7	19	*	12	4	0	49
Northern Mariana Isl	*	0	*	*	*	0	*	*	0	*
Ohio	40	8	37	29	41	*	25	7	0	112
Oklahoma	41	8	20	16	21	*	25	10	0	87
Oregon	43	13	33	13	40	*	28	6	0	92
Pennsylvania	35	12	45	26	30	*	15	7	0	101
Puerto Rico	*	0	6	*	*	*	*	5	0	13
Rhode Island	7	5	10	4	9	*	*	4	0	26
South Carolina	19	6	20	15	18	*	4	7	0	49
South Dakota	29	*	10	6	20	*	25	5	0	64
Tennessee	24	13	23	18	27	*	18	7	0	82
Texas	70	21	64	32	53	*	68	9	0	178
Utah	21	9	19	9	21	*	14	7	0	57
Vermont	10	4	17	5	10	*	*	4	0	35
Virgin Islands	*	0	*	*	*	*	*	4	0	8
Virginia	27	12	40	17	30	*	20	8	0	86
Washington	31	10	36	21	37	*	34	7	0	100
West Virginia	7	*	19	14	11	*	6	8	0	49
Wisconsin	48	17	25	21	40	*	29	8	0	100
Wyoming	15	6	10	5	7	*	15	7	0	41
Total	851	239	245	407	744	5	825	77	*	1,773

* Indicates one to three providers.
Source: FCC Form 477, Part I.

Detailed Summary Statistics: Counties and Census Tracts

Contents of this section

All counties

Chart 15	Distribution of Counties by Ratio of Residential Fixed Connections over 200 kbps in at Least One Direction to County Households as of December 31, 2013.....	50
Table 22	Distribution of Counties by Ratio of Residential Fixed Connections over 200 kbps in at Least One Direction to County Households by Technology as of December 31, 2013.....	51

All census tracts

Chart 16	Distribution of Census Tracts by Ratio of Residential Fixed Connections over 200 kbps in at Least One Direction to Tract Households as of December 31, 2013.....	52
Table 23	Distribution of Census Tracts by Ratio of Residential Fixed Connections over 200 kbps in at Least One Direction to Tract Households by Technology as of December 31, 2013.....	53
Table 24	Percentage of Census Tracts with Residential Fixed Connections by Technology as of December 31, 2013 (Connections over 200 kbps in at least one direction).....	54

Counties and census tracts in individual states

Table 25	Distribution of Counties by Ratio of Residential Fixed Connections to County Households by State as of December 31, 2013 (Connections over 200 kbps in at least one direction)	55
Table 26	Distribution of Census Tracts by Ratio of Residential Fixed Connections to Tract Households by State as of December 31, 2013 (Connections over 200 kbps in at least one direction)	57

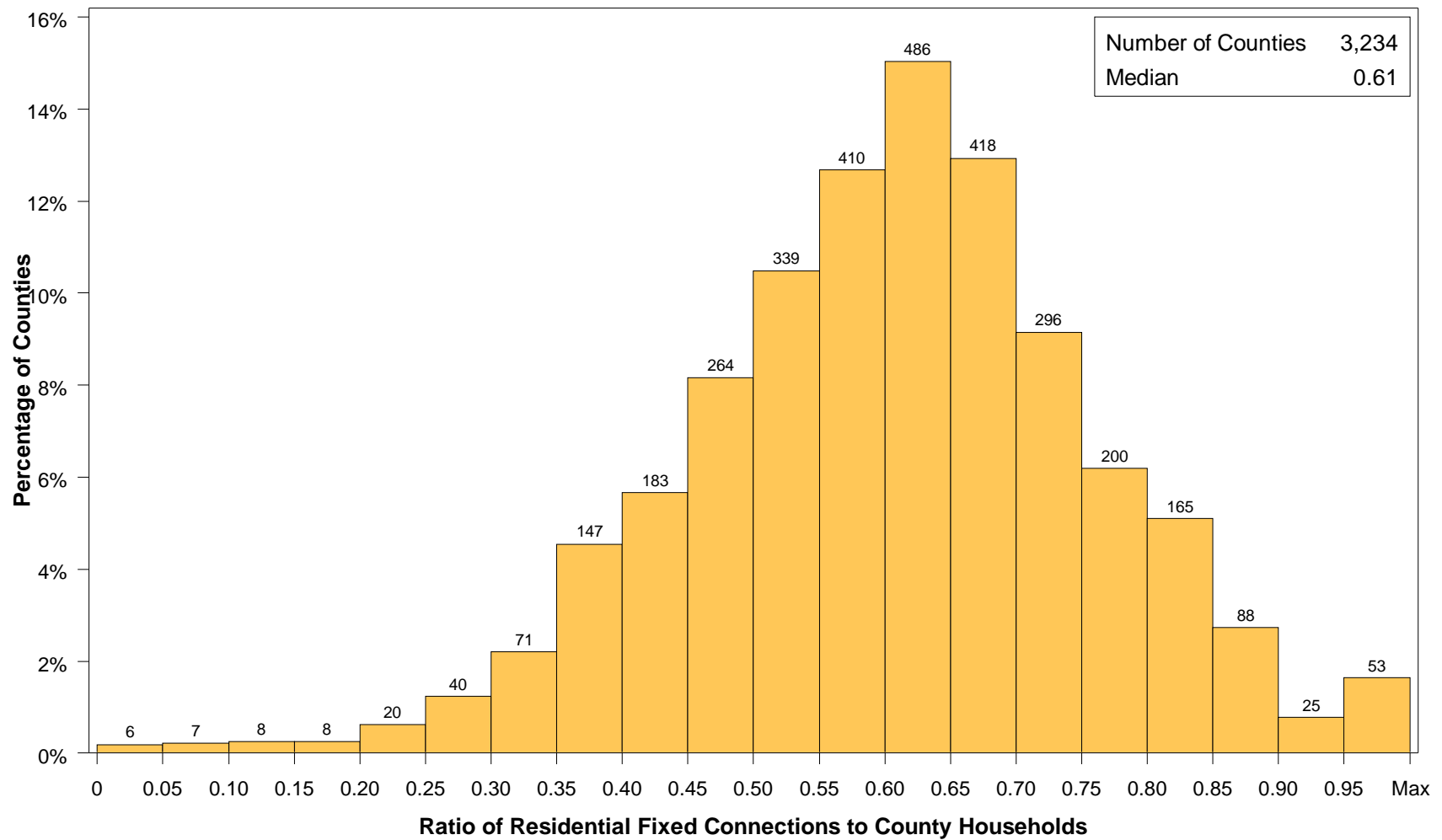
Maps: Residential subscription ratios by census tract

Map 1	Residential Fixed Connections over 200 kbps in at Least One Direction per 1,000 Households by Census Tract as of December 31, 2013	59
Map 2	Residential Fixed Connections at Least 3 Mbps Downstream and 768 kbps Upstream per 1,000 Households by Census Tract as of December 31, 2013.....	60

Maps: Number of providers by census tract

Map 3	Providers of Fixed Connections over 200 kbps in at Least One Direction by Census Tract as of December 31, 2013	61
Map 4	Providers of Residential Fixed Connections over 200 kbps in at Least One Direction by Census Tract as of December 31, 2013	62
Map 5	Providers of Residential Fixed Connections at Least 3 mbps Downstream and 768 kbps Upstream by Census Tract as of December 31, 2013	63
Map 6	Providers of Mobile Connections over 200 kbps in at Least One Direction by Census Tract as of December 31, 2013	64

Chart 15
Distribution of Counties by Ratio of Residential Fixed Connections over 200 kbps in at Least One Direction to County Households as of December 31, 2013



Note: Ratios over 1 were set to 1. See Technical Notes at the end of the report.

Sources: FCC Form 477, Part VI; Geolytics 2013 Block-Level Estimates; and Census 2010. 2010 housing units proxy households in island area counties.

Table 22
Distribution of Counties by Ratio of Residential Fixed Connections over 200 kbps in at Least One Direction
to County Households by Technology as of December 31, 2013

<i>Technology</i>	<i>Ratio of Residential Fixed Connections to County Households</i>										<i>100% or more</i>
	<i>Zero</i>	<i>Greater than 0 and no more than 5%</i>	<i>Greater than 5 and no more than 10%</i>	<i>Greater than 10 and no more than 20%</i>	<i>Greater than 20 and no more than 30%</i>	<i>Greater than 30 and no more than 40%</i>	<i>Greater than 40 and no more than 50%</i>	<i>Greater than 50 and no more than 60%</i>	<i>Greater than 60 and no more than 80%</i>	<i>Greater than 80 and no more than 100%</i>	
aDSL	0.6	2.8	6.3	25.8	29.3	20.7	9.0	3.7	1.3	0.3	0.1
sDSL	85.8	13.7	0.2	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0
Other Wireline	97.0	2.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cable Modem	12.1	8.7	9.0	17.4	16.1	14.5	12.2	6.2	3.4	0.2	0.2
FTTP	50.7	32.6	5.3	4.9	2.7	1.8	1.0	0.5	0.6	0.1	0.0
Satellite	0.6	68.9	21.8	7.9	0.7	0.1	0.0	0.0	0.0	0.0	0.0
Fixed Wireless	37.4	47.5	8.9	5.0	0.9	0.2	0.1	0.0	0.0	0.0	0.0
Power Line	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
All Other	99.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total	0.1	0.1	0.2	0.5	1.9	6.7	13.9	23.1	43.3	9.1	1.1

Note: Figures may not sum to totals due to rounding. See Technical Notes at the end of the report.

Sources: FCC Form 477, Part VI; Geolytics 2013 Block-Level Estimates; and Census 2010. 2010 housing units proxy households in island area counties.

Chart 16
Distribution of Census Tracts by Ratio of Residential Fixed Connections over 200 kbps in at Least One Direction to Tract Households as of December 31, 2013

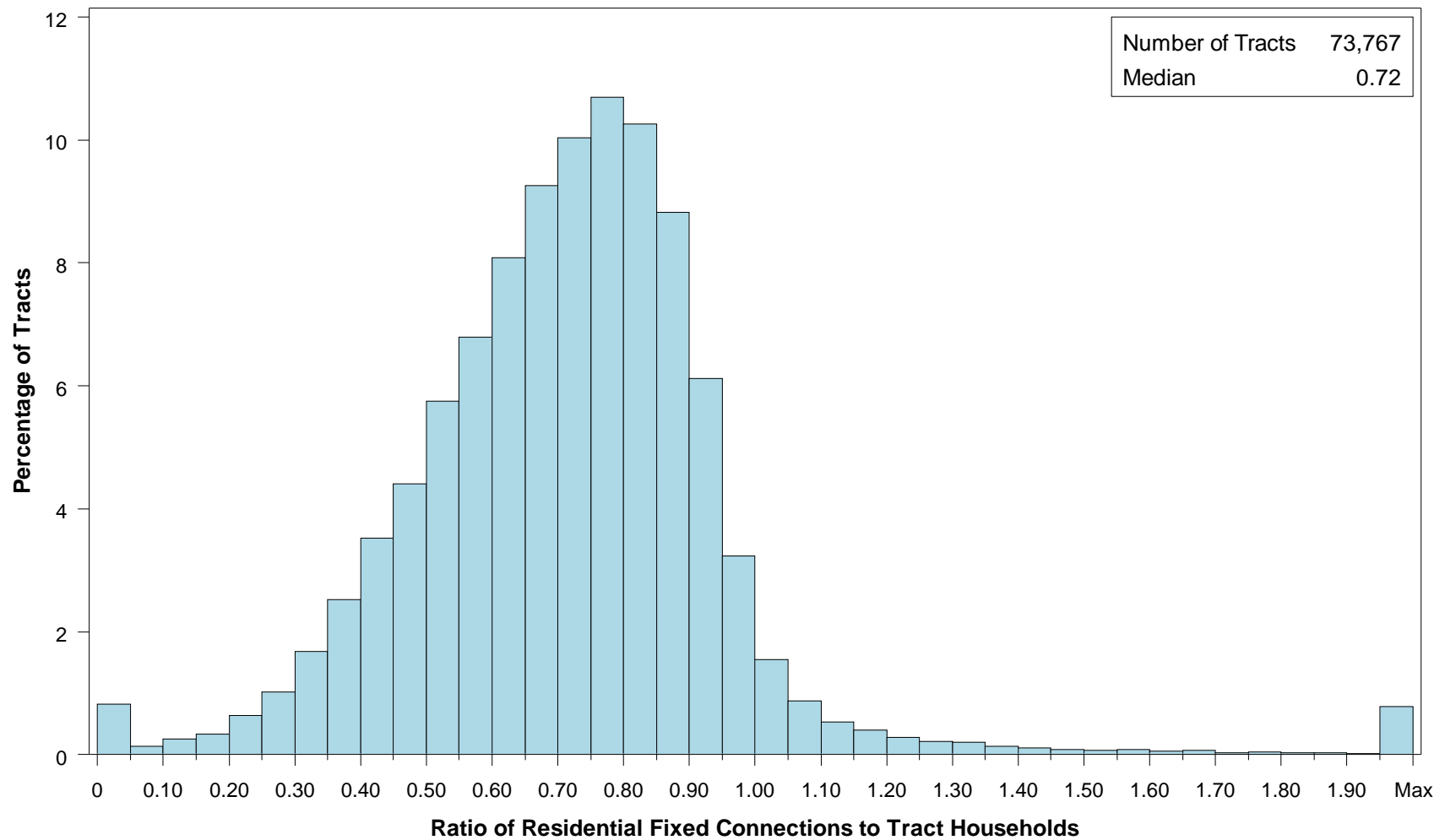


Table 23
Distribution of Census Tracts by Ratio of Residential Fixed Connections over 200 kbps in at Least One Direction
to Tract Households by Technology as of December 31, 2013

<i>Technology</i>	<i>Ratio of Residential Fixed Connections to Tract Households</i>										<i>100% or more</i>
	<i>Zero</i>	<i>Greater than 0 and no more than 5%</i>	<i>Greater than 5 and no more than 10%</i>	<i>Greater than 10 and no more than 20%</i>	<i>Greater than 20 and no more than 30%</i>	<i>Greater than 30 and no more than 40%</i>	<i>Greater than 40 and no more than 50%</i>	<i>Greater than 50 and no more than 60%</i>	<i>Greater than 60 and no more than 80%</i>	<i>Greater than 80 and no more than 100%</i>	
aDSL	1.4	10.5	11.6	26.5	22.5	14.7	7.4	2.9	1.5	0.4	0.6
sDSL	97.1	2.7	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other Wireline	99.7	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cable Modem	5.1	3.3	2.3	6.7	13.2	18.2	18.4	15.0	14.1	2.4	1.3
FTTP	69.6	12.4	2.2	3.0	3.0	3.7	3.2	1.8	0.9	0.1	0.1
Satellite	21.5	69.3	5.3	3.0	0.5	0.1	0.1	0.0	0.0	0.0	0.0
Fixed Wireless	80.8	15.0	2.0	1.5	0.4	0.2	0.1	0.0	0.0	0.0	0.0
Power Line	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
All Other	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total	0.7	0.1	0.1	0.6	1.7	4.2	8.0	12.5	38.1	28.5	5.6

Note: Figures may not sum to totals due to rounding. See Technical Notes at the end of the report.
Sources: FCC Form 477, Part VI; Geolytics 2013 Block-Level Estimates; and Census 2010.

Table 24
Percentage of Census Tracts with Residential Fixed Connections by Technology as of December 31, 2013
 (Connections over 200 kbps in at least one direction)

<i>Technology</i>	<i>Number of Providers</i>							
	<i>Zero</i>	<i>One</i>	<i>Two</i>	<i>Three</i>	<i>Four</i>	<i>Five</i>	<i>Six</i>	<i>Seven or More</i>
aDSL	1.4	56.9	31.1	9.2	1.2	0.1	0.0	0.0
sDSL	97.1	2.8	0.1	0.0	0.0	0.0	0.0	0.0
Other Wireline	99.7	0.3	0.0	0.0	0.0	0.0	0.0	0.0
Cable Modem	5.1	81.6	12.7	0.5	0.0	0.0	0.0	0.0
FTTP	69.6	29.3	1.0	0.1	0.0	0.0	0.0	0.0
Satellite	21.5	24.6	52.2	1.6	0.0	0.0	0.0	0.0
Fixed Wireless	80.8	13.3	4.3	1.2	0.3	0.1	0.0	0.0
Power Line	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
aDSL and/or Cable Modem and/or FTTP	0.9	2.7	48.1	32.7	12.7	2.5	0.4	0.1
Any Technology	0.7	0.4	9.4	19.4	31.8	22.2	10.1	6.1

Note: Figures may not sum to totals due to rounding. The number of providers in a census tract does not necessarily reflect the number of choices available to a particular household, and does not purport to measure competition.
 Sources: FCC Form 477, Part VI and Census 2010.

Table 25
Distribution of Counties by Ratio of Residential Fixed Connections to County Households by State as of December 31, 2013
(Connections over 200 kbps in at least one direction)

State	Counties	Ratio of Residential Fixed Connections over 200 kbps in at Least One Direction to County Households										
		Zero	Greater than 0 and no more than 5%	Greater than 5 and no more than 10%	Greater than 10 and no more than 20%	Greater than 20 and no more than 30%	Greater than 30 and no more than 40%	Greater than 40 and no more than 50%	Greater than 50 and no more than 60%	Greater than 60 and no more than 80%	Greater than 80 and no more than 100%	100% or more
Alabama	67	0	0	0	0	3	10	22	17	15	0	0
Alaska	29	0	0	0	0	2	2	6	3	13	2	1
American Samoa	5	2	1	0	1	0	0	1	0	0	0	0
Arizona	15	0	0	0	0	0	1	1	3	10	0	0
Arkansas	75	0	0	0	0	4	15	32	15	9	0	0
California	58	0	0	0	0	1	0	2	10	29	15	1
Colorado	64	0	0	0	0	0	1	3	14	26	14	6
Connecticut	8	0	0	0	0	0	0	0	0	4	4	0
Delaware	3	0	0	0	0	0	0	0	0	1	2	0
District of Columbia	1	0	0	0	0	0	0	0	0	1	0	0
Florida	67	0	0	0	0	1	2	9	12	24	17	2
Georgia	159	0	0	0	1	9	18	37	37	44	11	2
Guam	1	0	0	0	0	0	0	0	0	0	1	0
Hawaii	5	0	0	0	0	0	0	0	0	2	3	0
Idaho	44	0	0	0	0	0	0	6	12	24	2	0
Illinois	102	0	0	0	1	1	4	11	30	48	4	3
Indiana	92	0	0	0	0	0	0	13	33	43	3	0
Iowa	99	0	0	0	0	0	0	3	24	71	1	0
Kansas	105	0	0	0	0	0	1	7	24	60	13	0
Kentucky	120	0	0	0	0	3	5	28	32	50	2	0
Louisiana	64	0	0	0	0	1	11	14	14	22	2	0
Maine	16	0	0	0	0	0	0	0	2	11	3	0
Maryland	24	0	0	0	0	0	0	4	1	13	6	0
Massachusetts	14	0	0	0	0	0	0	0	0	7	4	3
Michigan	83	0	0	0	0	0	4	5	27	44	3	0
Minnesota	87	0	0	0	0	0	1	2	13	68	3	0
Mississippi	82	0	0	0	0	14	31	19	11	7	0	0
Missouri	115	0	0	0	1	2	9	26	41	33	3	0
Montana	56	0	0	0	0	1	1	6	7	37	4	0
Nebraska	93	0	0	0	0	0	4	5	25	57	2	0

Table 25 - Continued
Distribution of Counties by Ratio of Residential Fixed Connections to County Households by State as of December 31, 2013
(Connections over 200 kbps in at least one direction)

<i>Ratio of Residential Fixed Connections over 200 kbps in at Least One Direction to County Households</i>												
<i>State</i>	<i>Counties</i>	<i>Zero</i>	<i>Greater than 0 and no more than 5%</i>	<i>Greater than 5 and no more than 10%</i>	<i>Greater than 10 and no more than 20%</i>	<i>Greater than 20 and no more than 30%</i>	<i>Greater than 30 and no more than 40%</i>	<i>Greater than 40 and no more than 50%</i>	<i>Greater than 50 and no more than 60%</i>	<i>Greater than 60 and no more than 80%</i>	<i>Greater than 80 and no more than 100%</i>	<i>100% or more</i>
Nevada	17	0	0	0	0	0	2	5	3	7	0	0
New Hampshire	10	0	0	0	0	0	0	0	0	4	5	1
New Jersey	21	0	0	0	0	0	0	0	0	6	14	1
New Mexico	33	0	0	0	0	0	5	4	12	10	2	0
New York	62	0	0	0	0	0	0	0	2	41	18	1
North Carolina	100	0	0	0	0	0	2	19	24	41	13	1
North Dakota	53	0	0	0	0	0	0	3	6	31	12	1
Northern Mariana Isl	4	1	0	0	1	1	0	0	1	0	0	0
Ohio	88	0	0	0	0	0	1	3	22	54	8	0
Oklahoma	77	0	0	0	0	1	12	24	21	16	3	0
Oregon	36	0	0	0	0	0	0	1	10	21	4	0
Pennsylvania	67	0	0	0	0	0	1	1	10	41	13	1
Puerto Rico	78	0	2	7	9	5	13	7	7	9	11	8
Rhode Island	5	0	0	0	0	0	0	0	0	3	2	0
South Carolina	46	0	0	0	0	0	7	8	13	13	5	0
South Dakota	66	0	0	0	0	0	2	3	8	47	6	0
Tennessee	95	0	0	0	1	0	7	30	37	19	1	0
Texas	254	0	0	0	0	2	27	51	79	80	12	3
Utah	29	0	0	0	0	1	1	1	4	15	6	1
Vermont	14	0	0	0	0	0	0	0	0	7	7	0
Virgin Islands	3	0	0	0	0	1	0	0	1	1	0	0
Virginia	134	0	0	0	1	8	14	16	37	41	17	0
Washington	39	0	0	0	0	0	1	1	7	24	6	0
West Virginia	55	0	0	0	0	0	2	7	19	26	1	0
Wisconsin	72	0	0	0	0	0	0	1	10	57	4	0
Wyoming	23	0	0	0	0	0	0	2	7	13	1	0
Total	3,234	3	3	7	16	61	217	449	747	1400	295	36

Note: Figures may not sum to totals due to rounding. See Technical Notes at the end of the report.

Sources: FCC Form 477, Part VI (Connections); Geolytics 2013 Block-Level Estimates (Households for U.S. and District of Columbia); Census 2010 (Housing units for Puerto Rico, American Samoa, Guam, Northern Mariana Islands and U.S. Virgin Islands).

Table 26
Distribution of Census Tracts by Ratio of Residential Fixed Connections to Tract Households by State as of December 31, 2013
(Connections over 200 kbps in at least one direction)

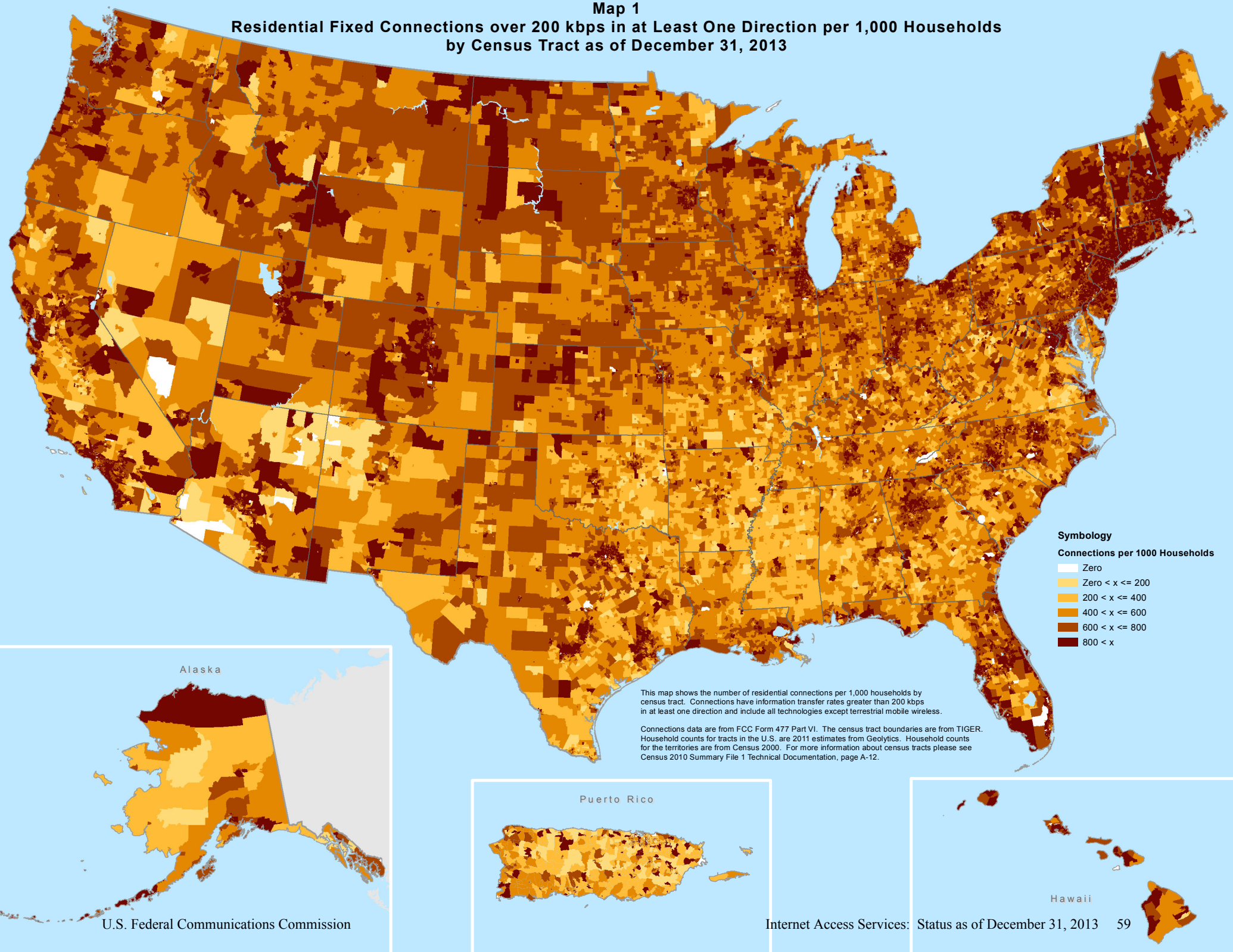
<i>Ratio of Residential Fixed Connections over 200 kbps in at Least One Direction to Tract Households</i>												
<i>State</i>	<i>Tracts</i>	<i>Zero</i>	<i>Greater than 0 and no more than 5%</i>	<i>Greater than 5 and no more than 10%</i>	<i>Greater than 10 and no more than 20%</i>	<i>Greater than 20 and no more than 30%</i>	<i>Greater than 30 and no more than 40%</i>	<i>Greater than 40 and no more than 50%</i>	<i>Greater than 50 and no more than 60%</i>	<i>Greater than 60 and no more than 80%</i>	<i>Greater than 80 and no more than 100%</i>	<i>100% or more</i>
Alabama	1,179	5	1	2	4	60	138	252	234	354	107	22
Alaska	167	1	0	1	2	5	8	11	20	77	28	14
American Samoa	18	3	6	1	0	2	1	1	0	2	0	2
Arizona	1,526	18	7	9	19	18	48	101	203	532	463	108
Arkansas	686	2	0	3	24	64	114	139	113	153	53	21
California	8,036	49	7	7	33	63	137	360	648	2,862	3,492	378
Colorado	1,249	13	0	2	0	3	12	41	99	514	473	92
Connecticut	829	3	0	0	0	2	13	29	55	275	425	27
Delaware	215	1	0	0	0	1	0	8	25	70	90	20
District of Columbia	179	1	0	0	0	0	2	14	30	78	44	10
Florida	4,199	38	2	0	2	21	90	206	406	1,605	1,465	364
Georgia	1,964	11	1	2	16	51	152	238	327	716	386	64
Guam	56	4	1	3	3	2	8	4	1	2	2	26
Hawaii	326	11	0	1	2	1	0	3	19	131	105	53
Idaho	298	1	0	0	2	2	9	16	53	170	38	7
Illinois	3,121	7	2	3	9	34	127	299	464	1,339	766	71
Indiana	1,508	5	2	0	4	13	36	180	346	684	218	20
Iowa	825	2	1	1	0	2	10	47	161	508	83	10
Kansas	770	9	0	0	4	7	31	67	145	331	135	41
Kentucky	1,115	11	1	2	7	23	67	141	240	443	154	26
Louisiana	1,136	14	1	0	4	22	97	183	227	423	140	25
Maine	351	0	0	0	0	2	5	13	35	175	93	28
Maryland	1,394	8	0	0	2	8	59	88	108	455	585	81
Massachusetts	1,471	12	1	1	0	1	7	19	78	494	772	86
Michigan	2,767	30	0	3	14	46	197	258	392	1,077	712	38
Minnesota	1,335	4	2	0	3	6	16	56	174	705	352	17
Mississippi	661	4	0	1	11	69	155	137	111	127	37	9
Missouri	1,393	6	0	2	11	48	116	177	269	485	242	37
Montana	271	2	0	2	4	3	4	17	56	136	34	13
Nebraska	532	2	0	0	0	0	11	38	85	263	114	19

Table 26 - Continued
Distribution of Census Tracts by Ratio of Residential Fixed Connections to Tract Households by State as of December 31, 2013
(Connections over 200 kbps in at least one direction)

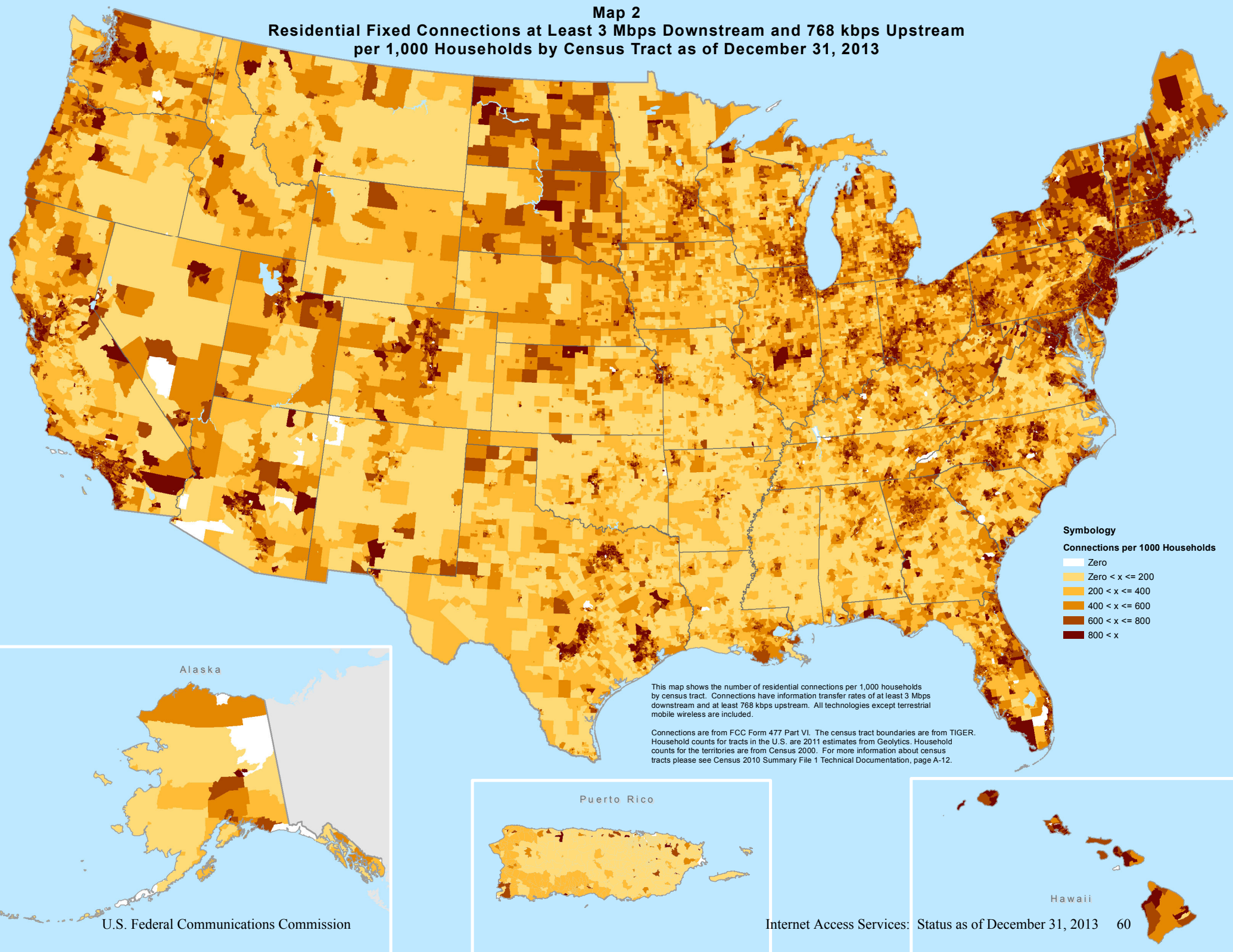
Ratio of Residential Fixed Connections over 200 kbps in at Least One Direction to Tract Households												
State	Tracts	Zero	Greater than 0 and no more than 5%	Greater than 5 and no more than 10%	Greater than 10 and no more than 20%	Greater than 20 and no more than 30%	Greater than 30 and no more than 40%	Greater than 40 and no more than 50%	Greater than 50 and no more than 60%	Greater than 60 and no more than 80%	Greater than 80 and no more than 100%	100% or more
Nevada	683	6	0	0	7	13	21	65	84	296	152	39
New Hampshire	294	2	0	0	1	0	0	1	6	95	174	15
New Jersey	2,004	9	1	0	1	0	4	18	65	667	1,087	152
New Mexico	499	4	9	7	6	12	39	77	92	185	54	14
New York	4,900	69	1	1	18	16	44	115	274	1,981	1,999	382
North Carolina	2,183	19	1	0	6	34	93	243	380	764	404	239
North Dakota	205	0	0	0	0	0	5	8	29	100	47	16
Northern Mariana Isl	22	2	0	0	2	4	3	2	2	4	1	2
Ohio	2,946	7	0	0	7	27	118	247	410	1,248	743	139
Oklahoma	1,046	2	3	6	17	53	113	166	197	301	144	44
Oregon	827	2	0	0	1	1	6	20	95	476	208	18
Pennsylvania	3,217	19	1	2	19	31	46	146	395	1,445	937	176
Puerto Rico	903	1	21	24	65	73	47	55	56	106	75	380
Rhode Island	241	1	0	0	1	0	0	1	10	129	94	5
South Carolina	1,097	11	0	1	5	32	89	151	191	350	172	95
South Dakota	222	0	1	0	0	1	8	6	37	127	36	6
Tennessee	1,497	20	2	0	7	52	131	278	315	474	187	31
Texas	5,253	40	2	9	51	186	472	772	756	1,591	1,016	358
Utah	588	4	1	4	1	1	4	12	52	266	203	40
Vermont	184	1	0	0	0	0	1	0	8	91	65	18
Virgin Islands	29	0	0	1	2	3	2	2	2	5	4	8
Virginia	1,895	22	0	0	13	65	95	148	232	522	676	122
Washington	1,446	2	0	2	4	14	18	45	104	669	561	27
West Virginia	484	0	1	2	11	16	32	44	93	197	65	23
Wisconsin	1,393	3	2	0	4	5	47	95	201	748	266	22
Wyoming	132	1	0	0	0	4	2	9	23	67	24	2
Total	73,767	524	81	105	429	1,222	3,110	5,869	9,233	28,090	21,002	4,102

Note: Figures may not sum to totals due to rounding. See Technical Notes at the end of the report.
Sources: FCC Form 477, Part VI (Connections); Geolytics 2013 Block-Level Estimates (Households for U.S. and District of Columbia); Census 2010 (Households for Puerto Rico, American Samoa, Guam, Northern Mariana Islands and U.S. Virgin Islands).

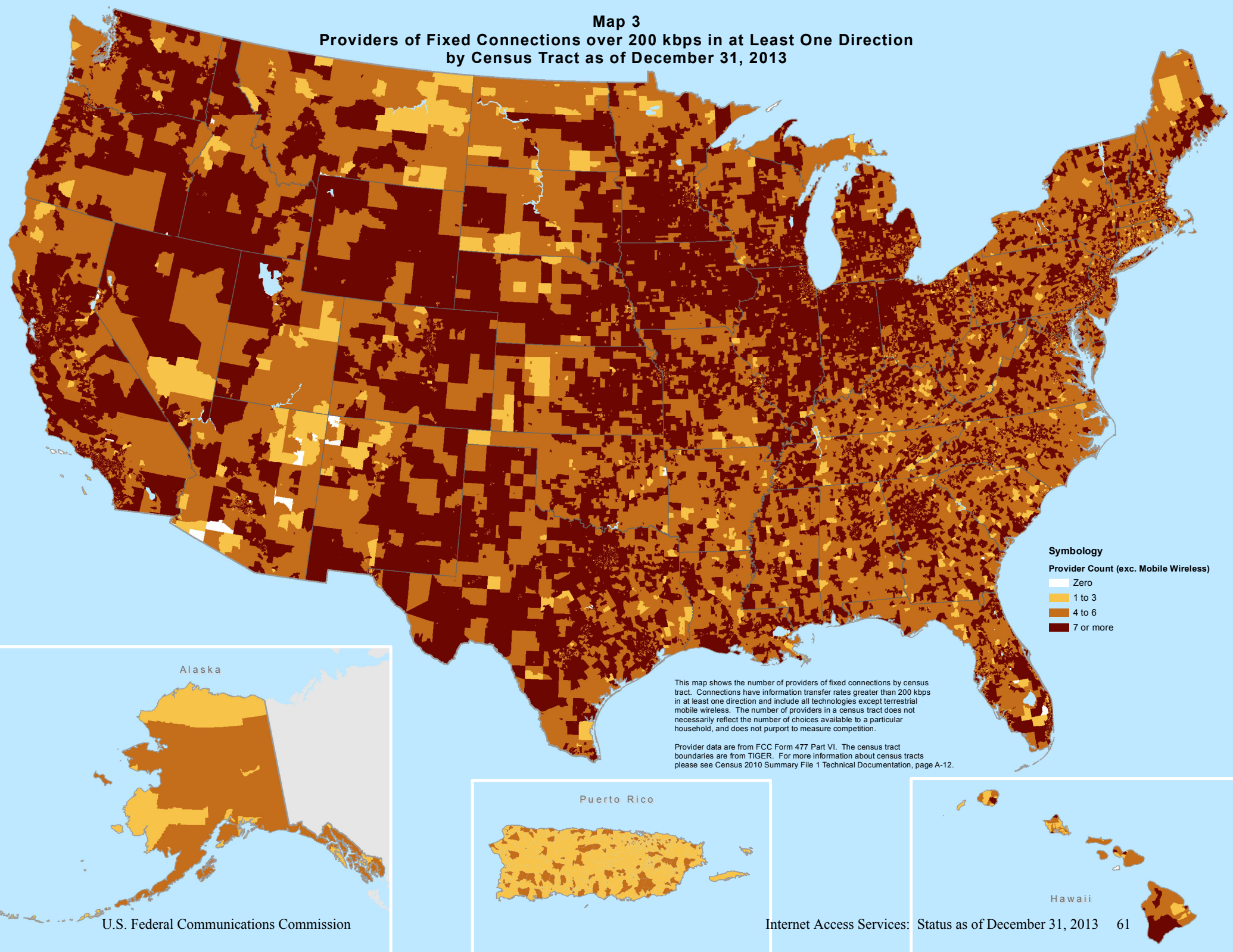
Map 1
Residential Fixed Connections over 200 kbps in at Least One Direction per 1,000 Households
by Census Tract as of December 31, 2013



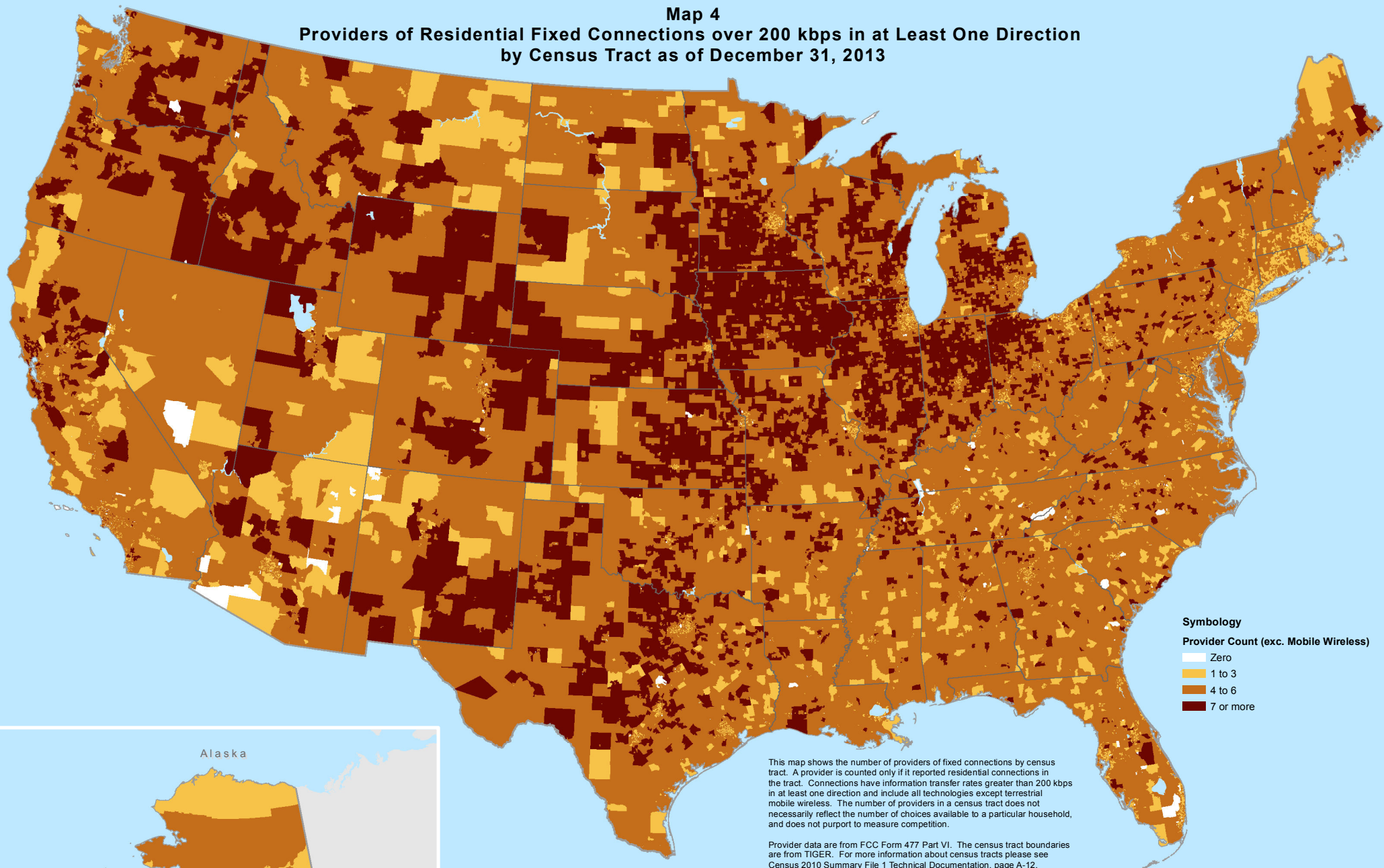
Map 2
Residential Fixed Connections at Least 3 Mbps Downstream and 768 kbps Upstream
per 1,000 Households by Census Tract as of December 31, 2013



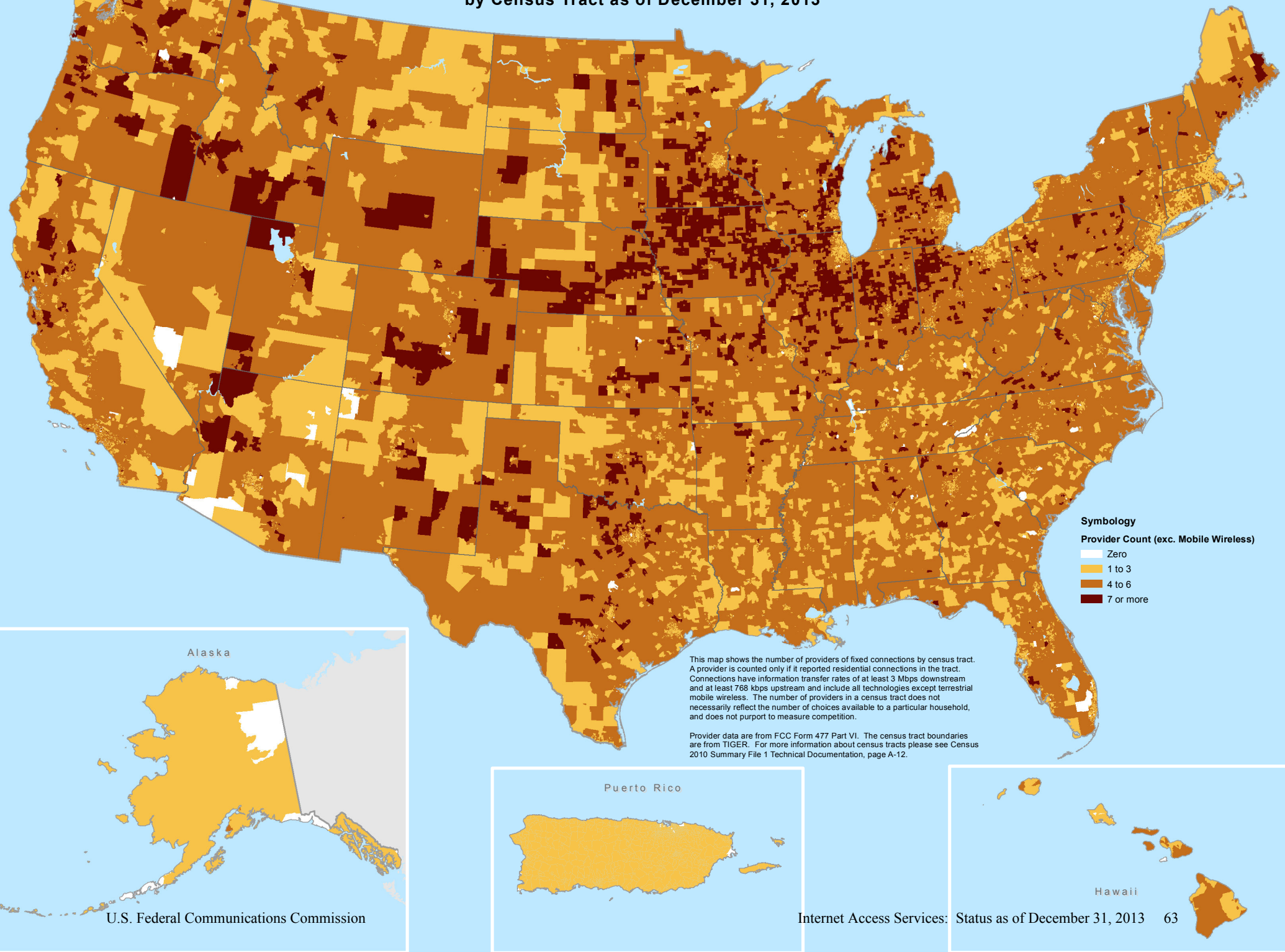
Map 3
Providers of Fixed Connections over 200 kbps in at Least One Direction
by Census Tract as of December 31, 2013



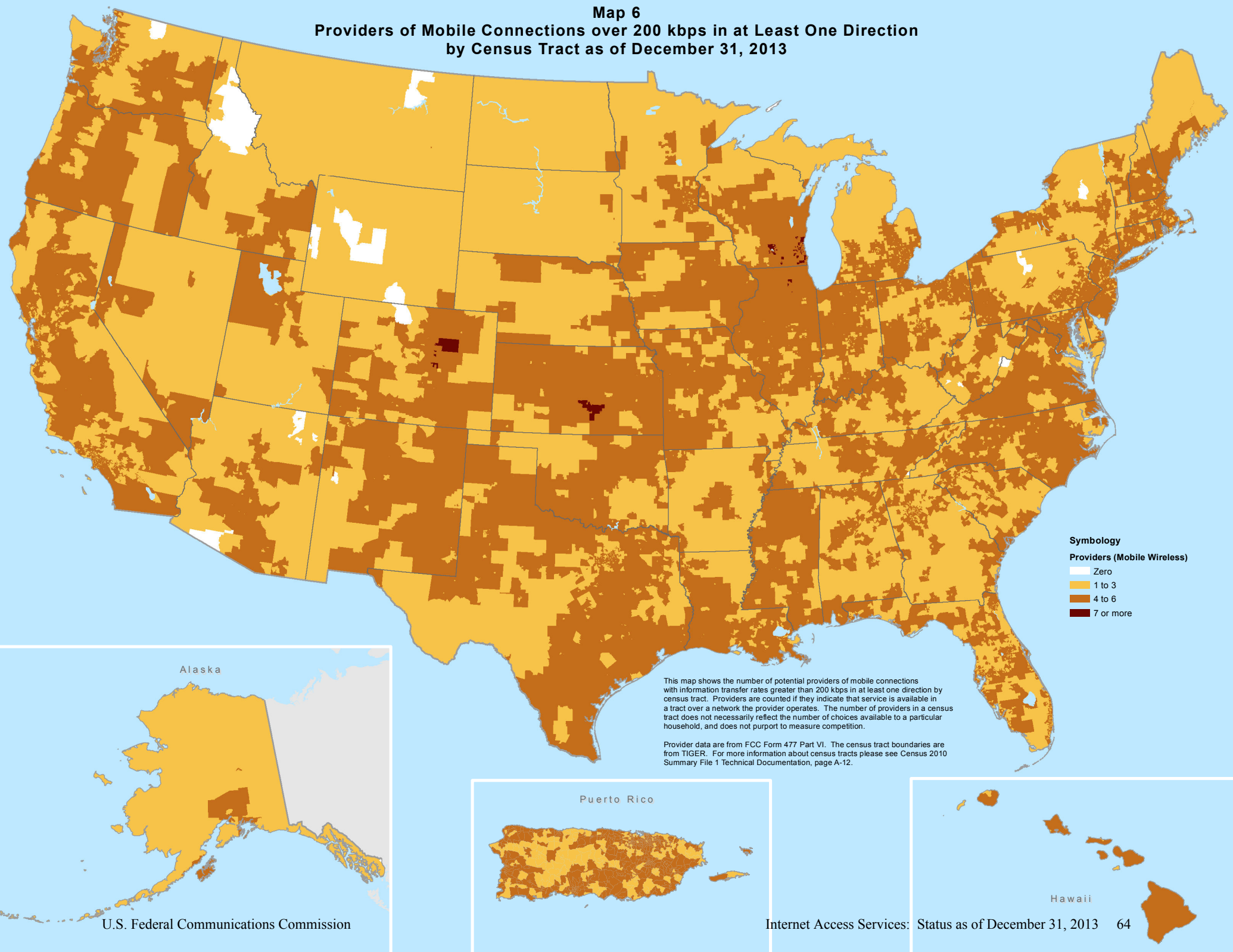
Map 4
Providers of Residential Fixed Connections over 200 kbps in at Least One Direction
by Census Tract as of December 31, 2013



Map 5
Providers of Residential Fixed Connections at Least 3 Mbps Downstream and 768 kbps Upstream
by Census Tract as of December 31, 2013



Map 6
Providers of Mobile Connections over 200 kbps in at Least One Direction
by Census Tract as of December 31, 2013



Detailed Correlation Results: Demographic Measures

Contents of this section

Household income

Chart 17	Ratio of Residential Fixed Connections over 200 kbps in at Least One Direction to Households by Income Deciles as of December 31, 2013 (County Data)	66
Chart 18	Subscribership Ratio Distributions by Income Deciles as of December 31, 2013	67

Household density

Chart 19	Ratio of Residential Fixed Connections over 200 kbps in at Least One Direction to Households by Density Deciles as of December 31, 2013 (County Data)	68
Chart 20	Subscribership Ratio Distributions by Density Deciles as of December 31, 2013	69

Education

Chart 21	Ratio of Residential Fixed Connections over 200 kbps in at Least One Direction to Households by Share of College Graduates in Deciles as of December 31, 2013 (County Data)	70
Chart 22	Subscribership Ratio Distributions by Share of Population with a College Degree (in Deciles) as of December 31, 2013	71

Age

Chart 23	Ratio of Residential Fixed Connections over 200 kbps in at Least One Direction to Households by Average Age in Deciles as of December 31, 2013 (County Data)	72
Chart 24	Subscribership Ratio Distributions by Average Age of County Population (in Deciles) as of December 31, 2013	73

Race

Chart 25	Ratio of Residential Fixed Connections over 200 kbps in at Least One Direction to Households by Share White Alone in Deciles as of December 31, 2013 (County Data)	74
Chart 26	Subscribership Ratio Distributions by Share White Alone (in Deciles) as of December 31, 2013	75

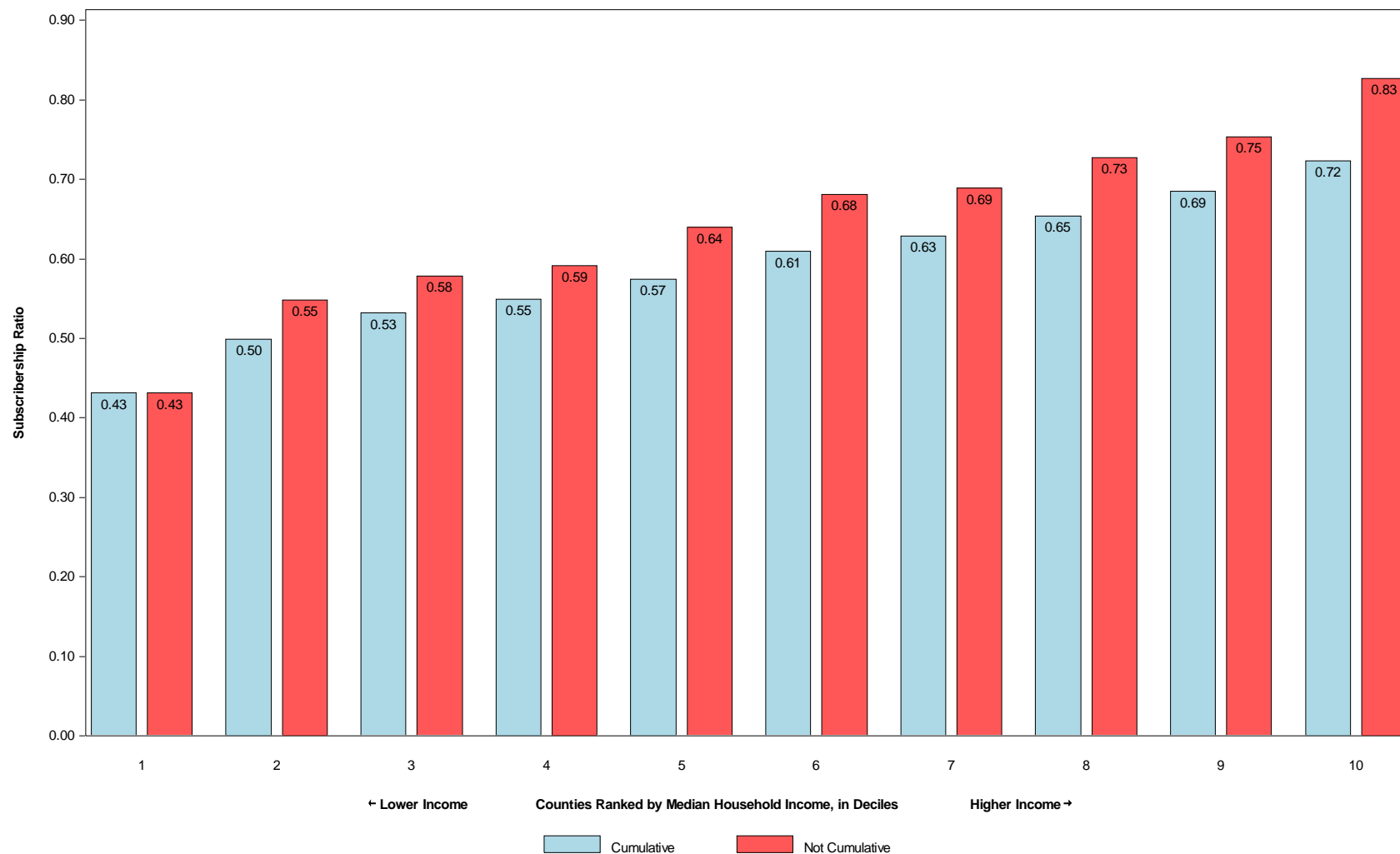
Technology and household density

Chart 27	Subscribership Ratios by Technology and Tract Household Density as of December 31, 2013	76
----------	---	----

Income and household density

Chart 28	Average Subscribership Ratios by Income and Household Density as of December 31, 2013, by Tract	77
Chart 29	Median Ratios of Residential Fixed Connections over 200 kbps in at Least One Direction to Households by Income and Density as of December 31, 2013	78

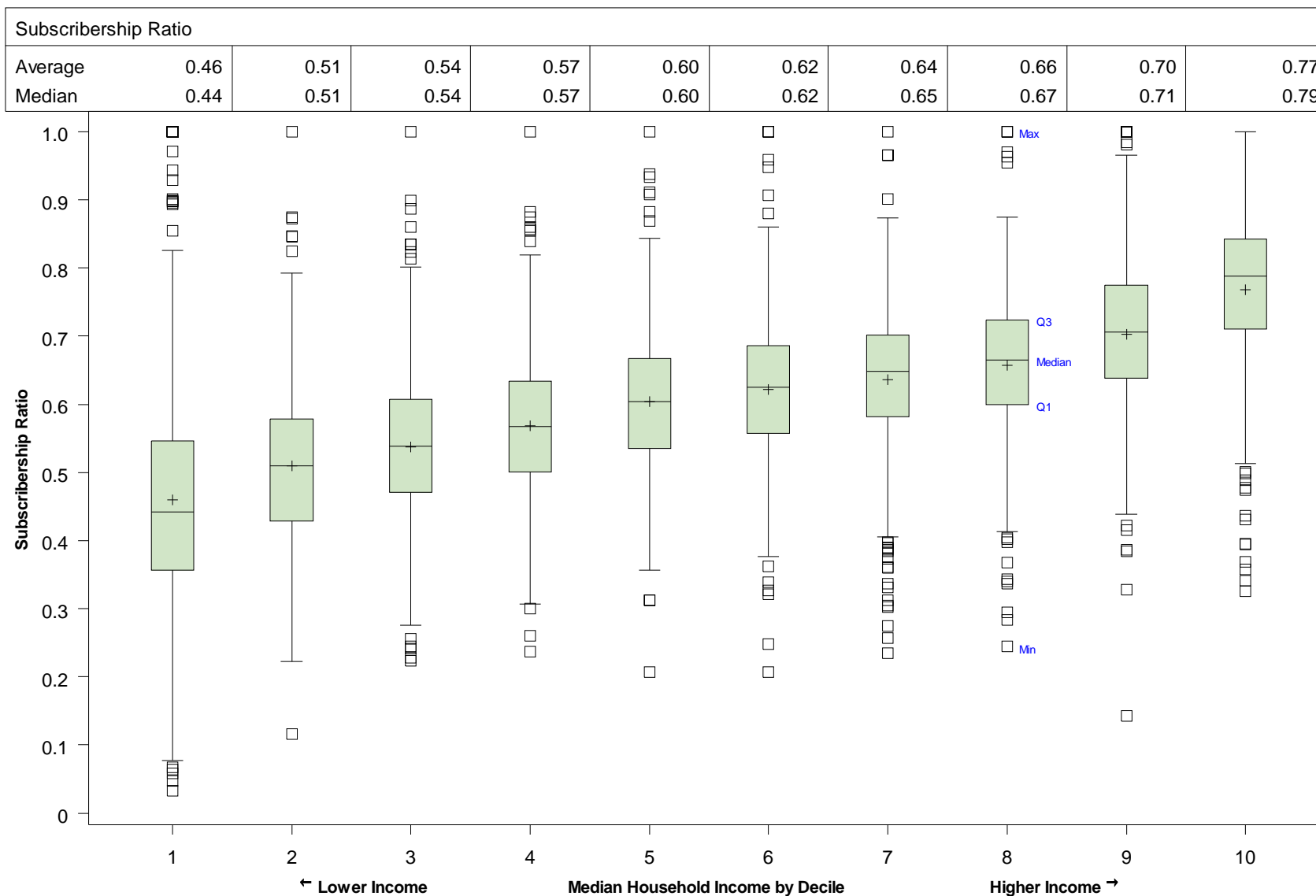
Chart 17
Ratio of Residential Fixed Connections over 200 kbps in at Least One Direction to Households
by Income Deciles as of December 31, 2013
(County Data)



This chart shows cumulative and non-cumulative subscribership ratios by income deciles. Counties were grouped into income deciles based on county median household income in 2009, as reported by the Census Bureau. For each decile, the height of any red, non-cumulative bar represents the ratio of the sum of residential fixed connections over 200 kbps in at least one direction across counties in the decile to the sum of households across counties in the decile. The height of the blue, cumulative bar for decile N represents the ratio of the sum of residential fixed connections over 200 kbps in at least one direction across all counties in decile N and all deciles less than N to the number of households in all the counties in decile N and deciles less than N.

Sources: FCC Form 477, Part VI; Geolytics 2013 Block-Level Estimates (Households in 2013); and 2008-2012 ACS 5-year Estimates (Median household income).

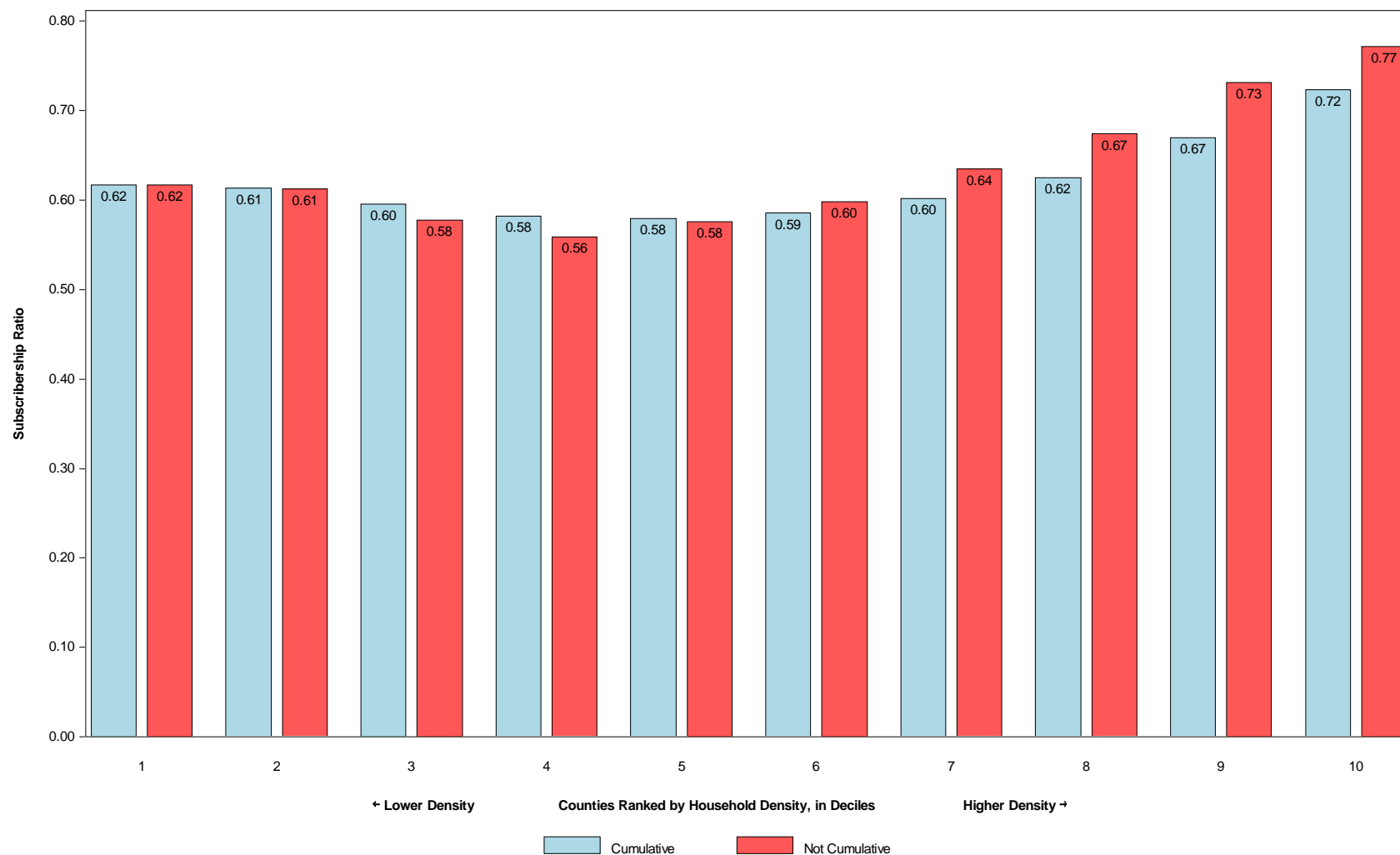
Chart 18
Subscribership Ratio Distributions by Income Deciles as of December 31, 2013



Note: Each box plot shows the distribution of residential subscribership to connections over 200 kbps in at least one direction for counties in the income decile. Some of the features are labeled, but note also that + denotes the position of the average residential subscribership ratio taken across all counties in the decile; ⊥ is the minimum observation above $Q1-1.5(Q3-Q1)$; T is the maximum observation below $Q3+1.5(Q3-Q1)$; and □ is any data point beyond $Q1-1.5(Q3-Q1)$ or $Q3+1.5(Q3-Q1)$. Ratios greater than 1 were set to 1.

Sources: FCC Form 477, Part VI; Geolytics 2013 Block-Level Estimates (Households in 2013); and 2008-2012 ACS 5-year Estimates (Median household income).

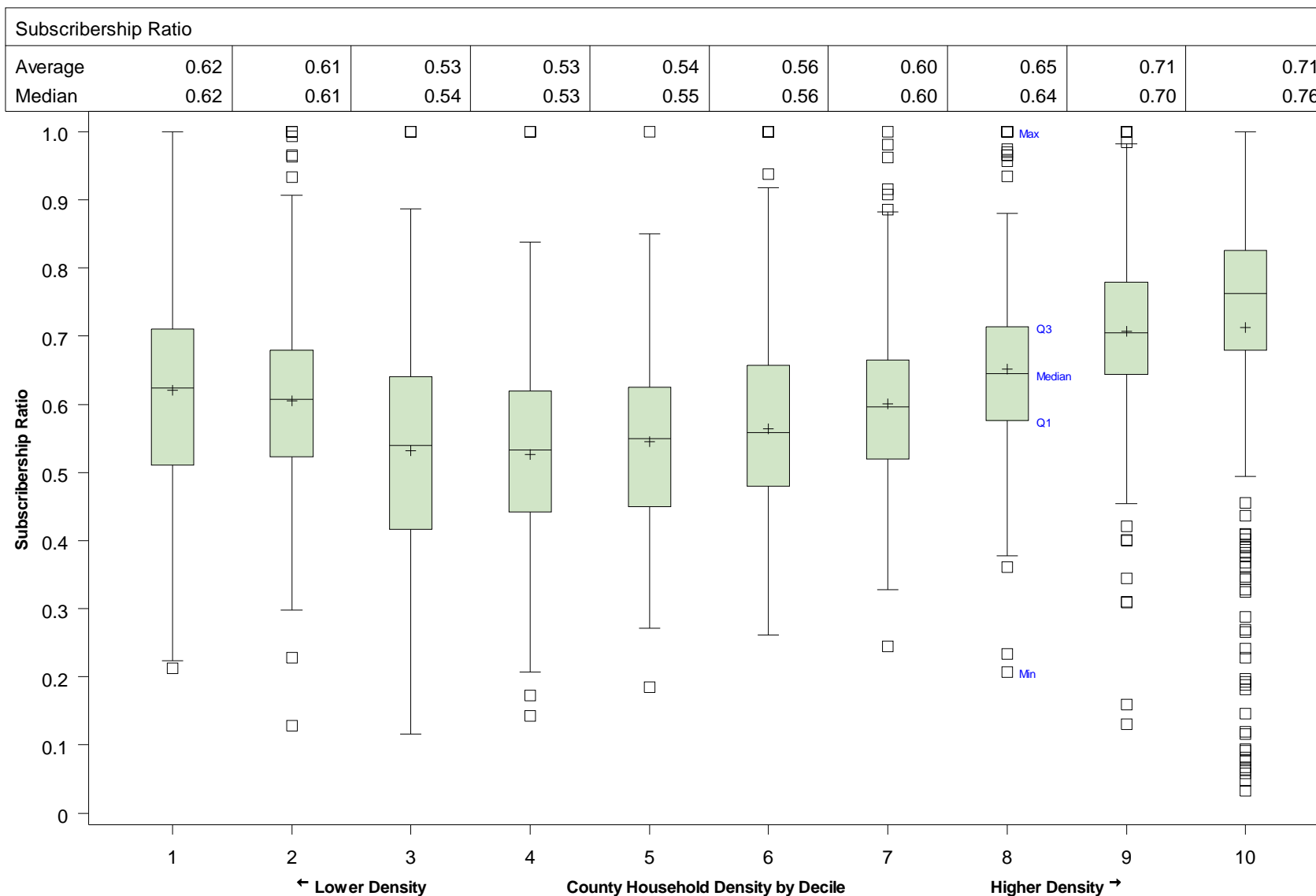
Chart 19
Ratio of Residential Fixed Connections over 200 kbps in at Least One Direction to Households
by Density Deciles as of December 31, 2013
 (County Data)



This chart shows cumulative and non-cumulative subscribership ratios by density deciles. Counties were grouped into density deciles based on households per square mile, calculated as the ratio of estimated county households in 2010 to county land area from the Census Bureau. For each decile, the height of any red, non-cumulative bar represents the ratio of the sum of residential fixed connections over 200 kbps in at least one direction across counties in the decile to the sum of households across counties in the decile. The height of the blue, cumulative bar for decile N represents the ratio of the sum of residential fixed connections over 200 kbps in at least one direction across all counties in decile N and all deciles less than N to the number of households in all the counties in decile N and deciles less than N.

Sources: FCC Form 477, Part VI; Geolytics 2013 Block-Level Estimates (Households in 2013); and Census 2010 (County land area).

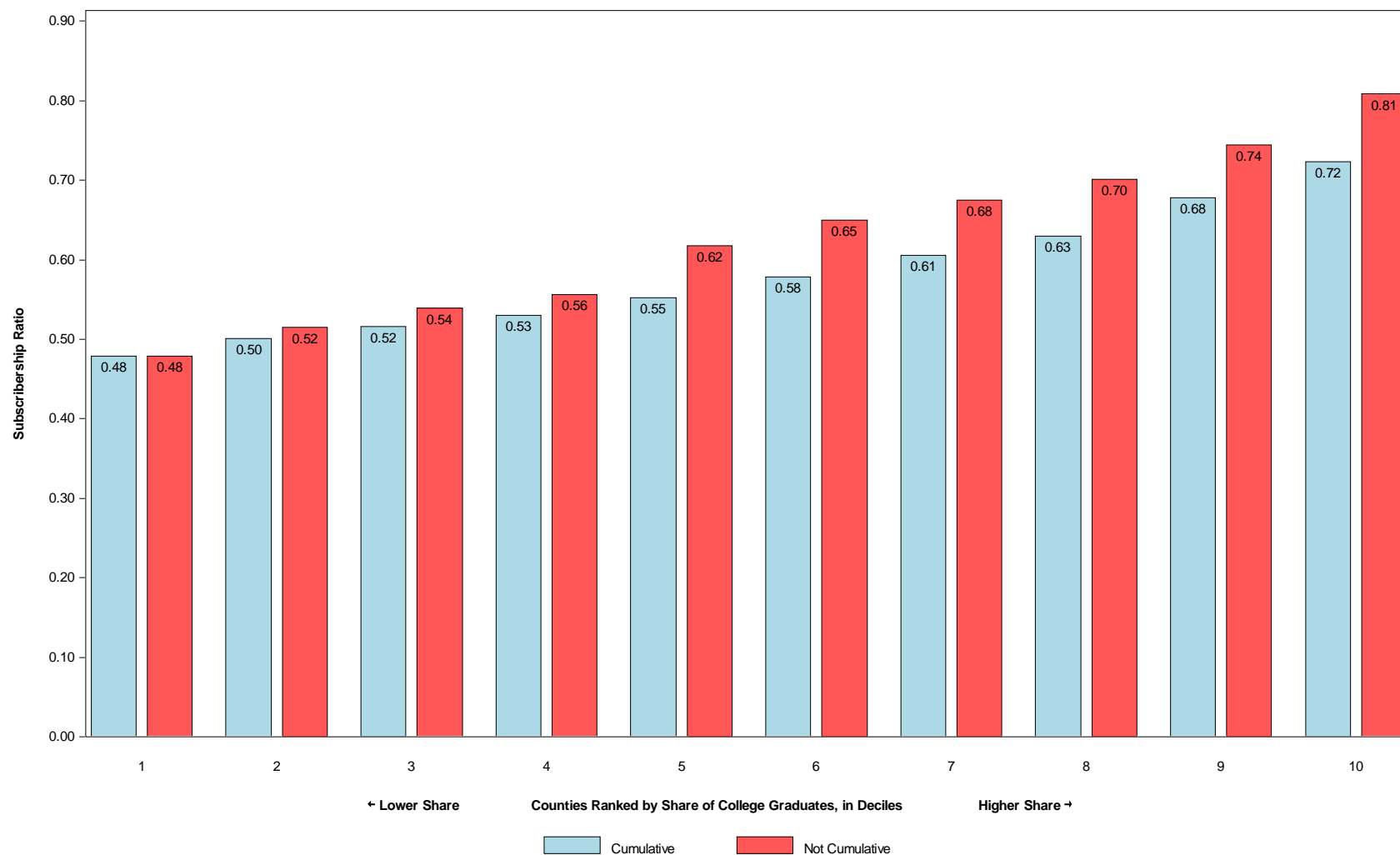
Chart 20
Subscribership Ratio Distributions by Density Deciles as of December 31, 2013



Note: Each box plot shows the distribution of residential subscribership to connections over 200 kbps in at least one direction for counties in the density decile. Some of the features are labeled, but note also that + denotes the position of the average residential subscribership ratio taken across all counties in the decile; ⊥ is the minimum observation above $Q1-1.5(Q3-Q1)$; T is the maximum observation below $Q3+1.5(Q3-Q1)$; and □ is any data point beyond $Q1-1.5(Q3-Q1)$ or $Q3+1.5(Q3-Q1)$. Ratios greater than 1 were set to 1.

Sources: FCC Form 477, Part VI; Geolytics 2013 Block-Level Estimates (Households in 2013); and Census 2010 (County land area).

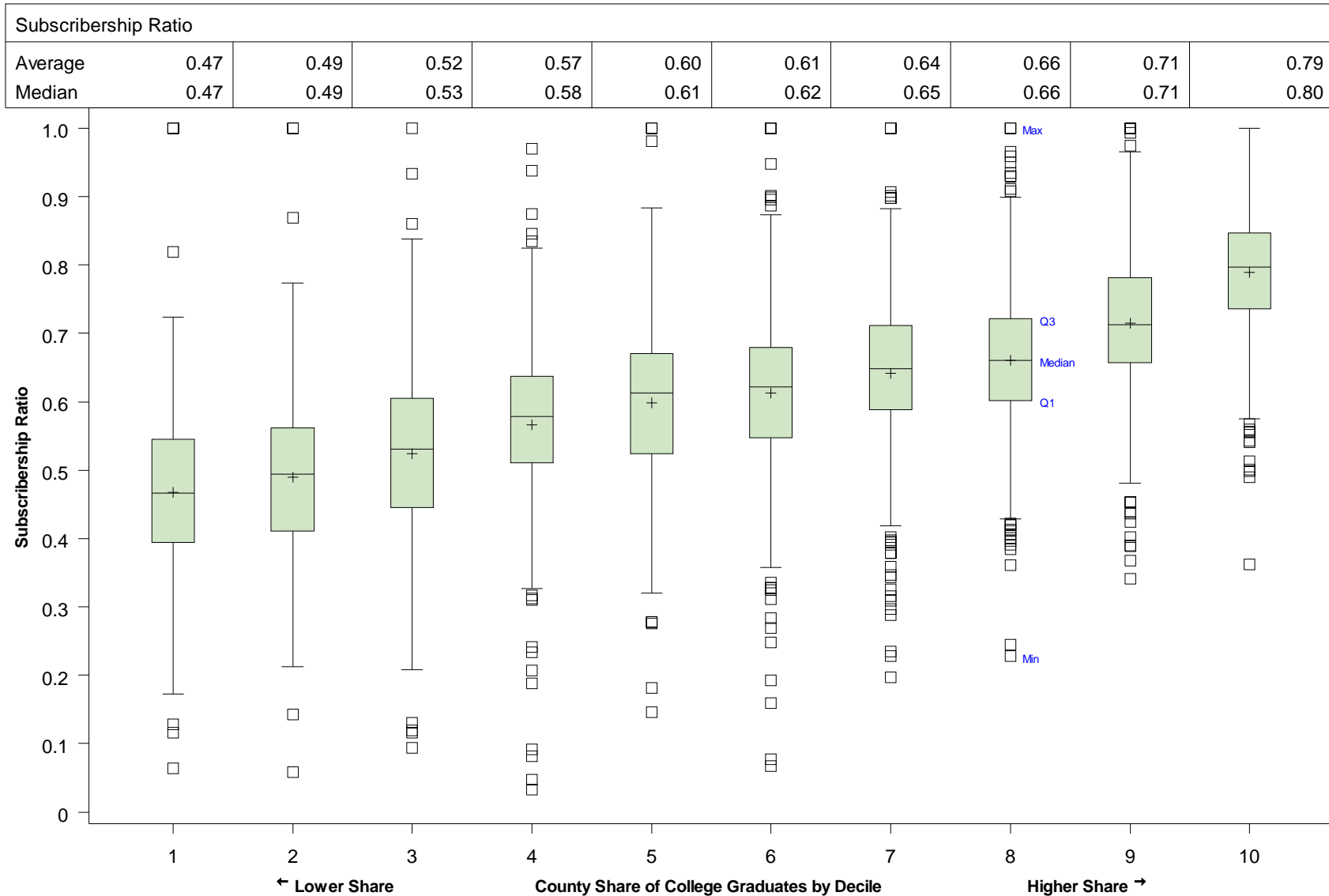
Chart 21
Ratio of Residential Fixed Connections over 200 kbps in at Least One Direction to Households
by Share of College Graduates in Deciles as of December 31, 2013
 (County Data)



This chart shows cumulative and non-cumulative subscribership ratios by county share of college graduates in deciles. Counties were grouped into deciles based on the share of the county population at least 25 years of age with a college degree or higher educational attainment. For each decile, the height of any red, non-cumulative bar represents the ratio of the sum of residential fixed connections over 200 kbps in at least one direction across counties in the decile to the sum of households across counties in the decile. The height of the blue, cumulative bar for decile N represents the ratio of the sum of residential fixed connections over 200 kbps in at least one direction across all counties in decile N and all deciles less than N, to the number of households in all the counties in decile N and deciles less than N.

Sources: FCC Form 477, Part VI; Geolytics 2013 Block-Level Estimates (Households in 2013); and 2008-2012 ACS 5-year Estimates (County educational attainment).

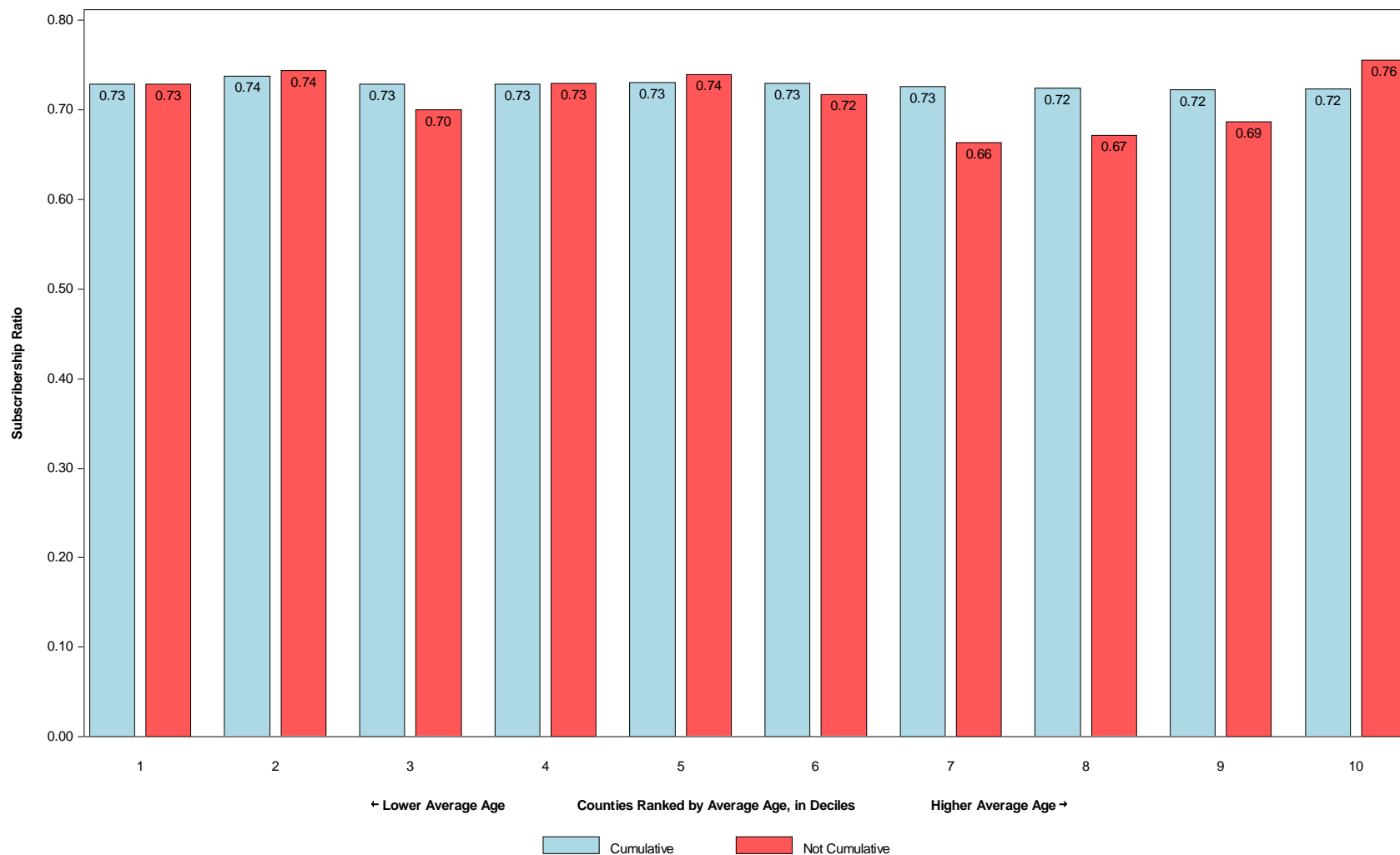
Chart 22
Subscribership Ratio Distributions by Share of Population with a College Degree (in Deciles) as of December 31, 2013



Note: Each box plot shows the distribution of residential subscribership to connections over 200 kbps in at least one direction for counties in the share decile. Some of the features are labeled, but note also that + denotes the position of the average residential subscribership ratio taken across all counties in the decile; ⊥ is the minimum observation above $Q1-1.5(Q3-Q1)$; T is the maximum observation below $Q3+1.5(Q3-Q1)$; and □ is a data point beyond $Q1-1.5(Q3-Q1)$ or $Q3+1.5(Q3-Q1)$. Ratios greater than 1 were set to 1.

Sources: FCC Form 477, Part VI; Geolytics 2013 Block-Level Estimates (Households in 2013); and 2008-2012 ACS 5-year Estimates (County educational attainment).

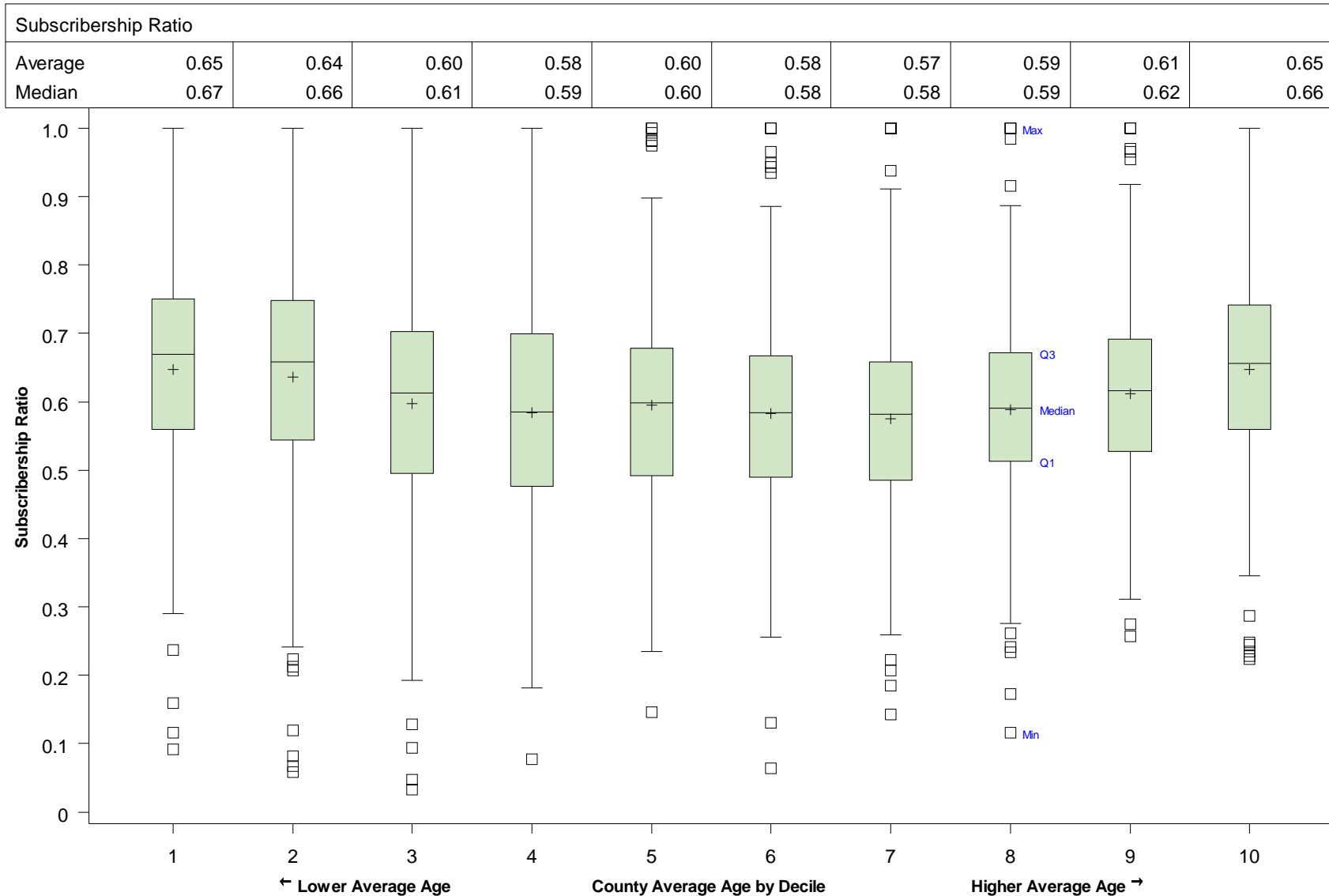
Chart 23
Ratio of Residential Fixed Connections over 200 kbps in at Least One Direction to Households
by Average Age in Deciles as of December 31, 2013
 (County Data)



This chart shows cumulative and non-cumulative subscribership ratios by county average age in deciles. Counties were grouped into deciles based on the average age of the county population. For each decile, the height of any red, non-cumulative bar represents the ratio of the sum of residential fixed connections over 200 kbps in at least one direction across counties in the decile to the sum of households across counties in the decile. The height of the blue, cumulative bar for decile N represents the ratio of the sum of residential fixed connections over 200 kbps in at least one direction across all counties in decile N and all deciles less than N, to the number of households in all the counties in decile N and deciles less than N.

Sources: FCC Form 477, Part VI; Geolytics 2013 Block-Level Estimates (Households in 2013); and 2008-2012 ACS 5-year Estimates (County average age).

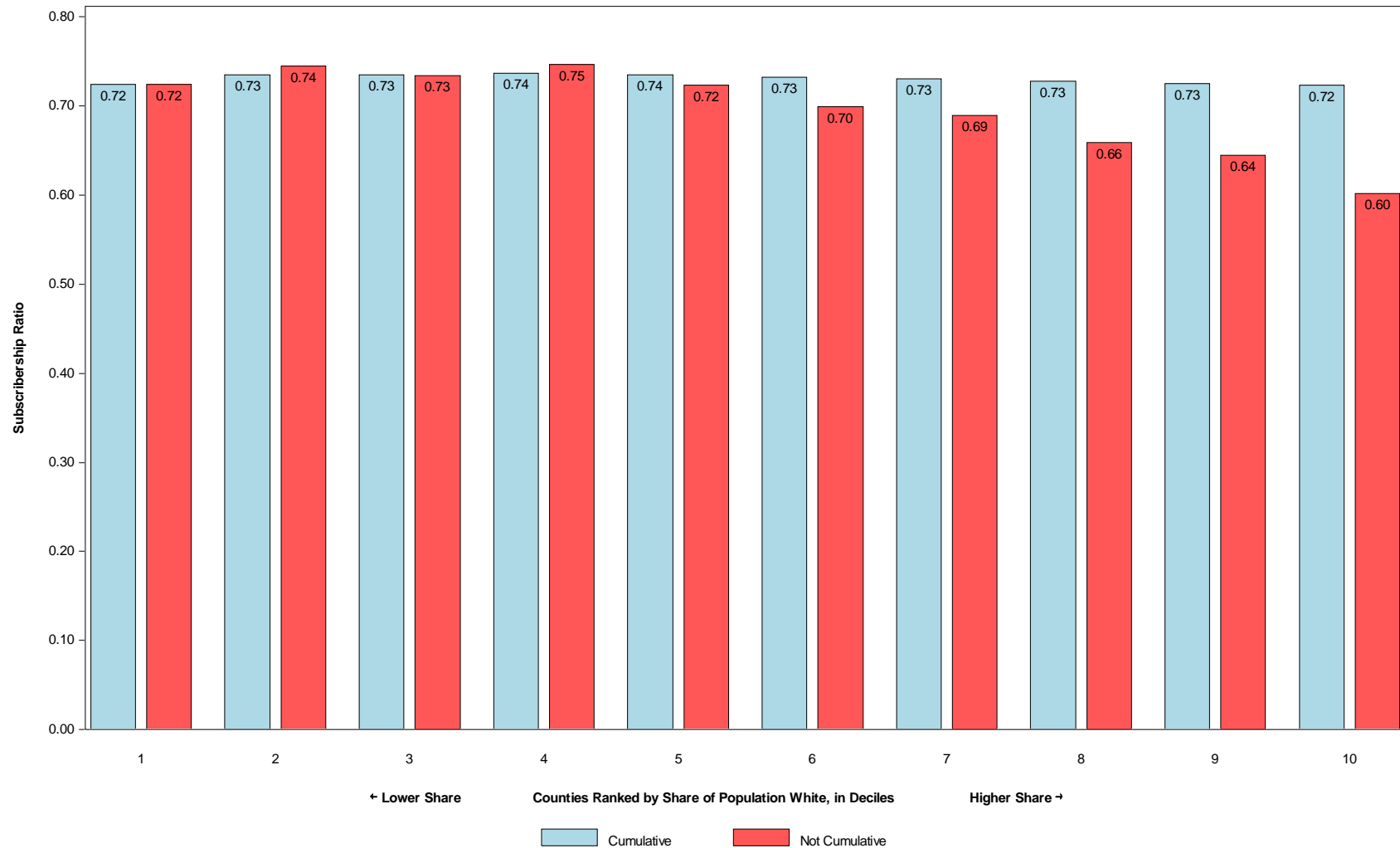
Chart 24
Subscribership Ratio Distributions by Average Age of County Population (in Deciles) as of December 31, 2013



Note: Each box plot shows the distribution of residential subscribership to connections over 200 kbps in at least one direction for counties in the average age decile. Some of the features are labeled, but note also that + denotes the position of the average residential subscribership ratio taken across all counties in the decile; ⊥ is the minimum observation above $Q1-1.5(Q3-Q1)$; T is the maximum observation below $Q3+1.5(Q3-Q1)$; and □ is a data point beyond $Q1-1.5(Q3-Q1)$ or $Q3+1.5(Q3-Q1)$. Ratios greater than 1 were set to 1.

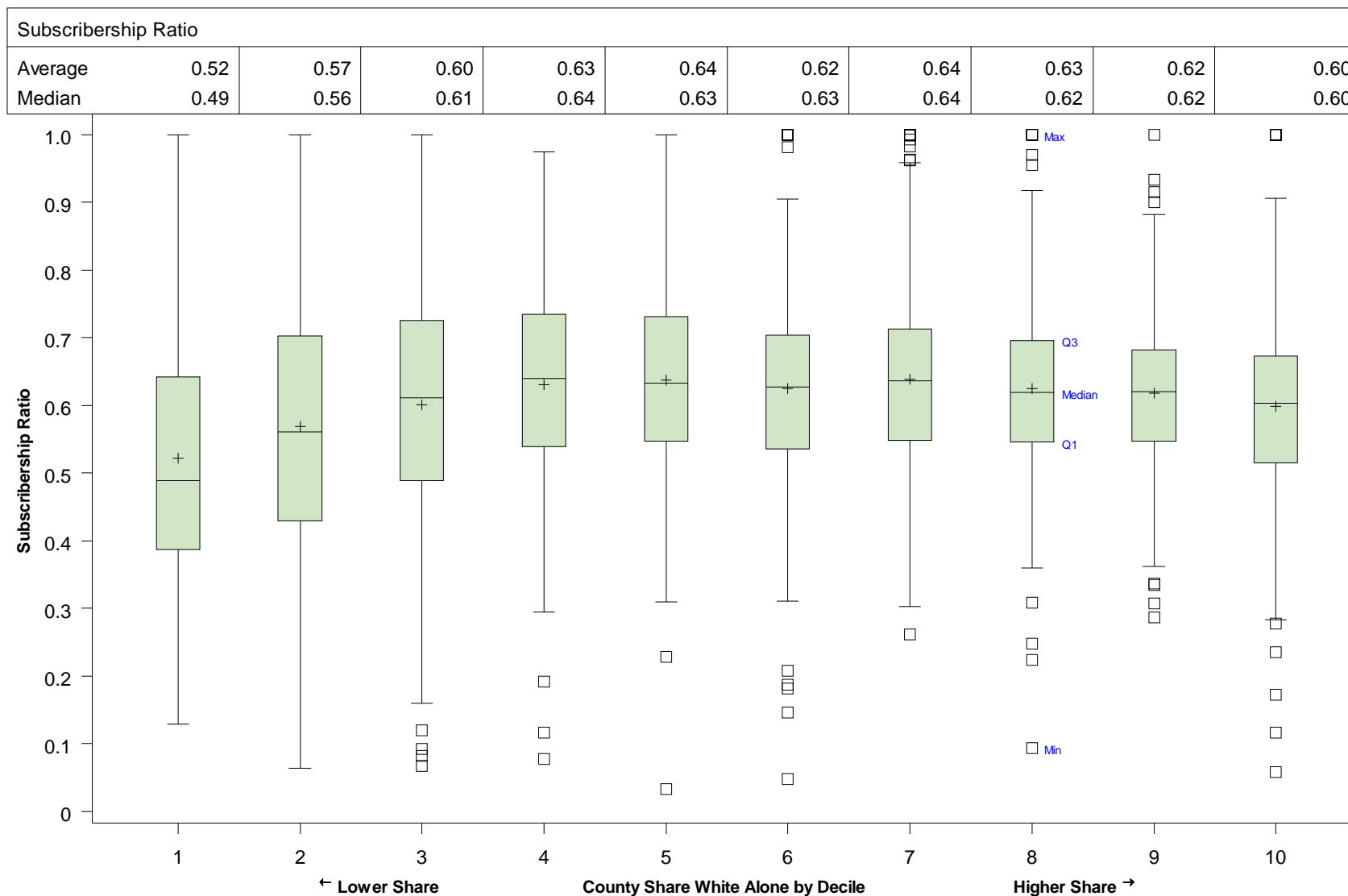
Sources: FCC Form 477, Part VI; Geolytics 2013 Block-Level Estimates (Households in 2013); and 2008-2012 ACS 5-year Estimates (County average age).

Chart 25
Ratio of Residential Fixed Connections over 200 kbps in at Least One Direction to Households
by Share White Alone in Deciles as of December 31, 2013
(County Data)



This chart shows cumulative and non-cumulative subscribership ratios by the share of county population white alone in deciles. Counties were grouped into deciles based on the share of the county population that reported their race as white alone. For each decile, the height of any red, non-cumulative bar represents the ratio of the sum of residential fixed connections over 200 kbps in at least one direction across counties in the decile to the sum of households across counties in the decile. The height of the blue, cumulative bar for decile N represents the ratio of the sum of residential fixed connections over 200 kbps in at least one direction across all counties in decile N and all deciles less than N, to the number of households in all the counties in decile N and deciles less than N. Sources: FCC Form 477, Part VI; Geolytics 2013 Block-Level Estimates (Households in 2013); and 2008-2012 ACS 5-year Estimates (Race).

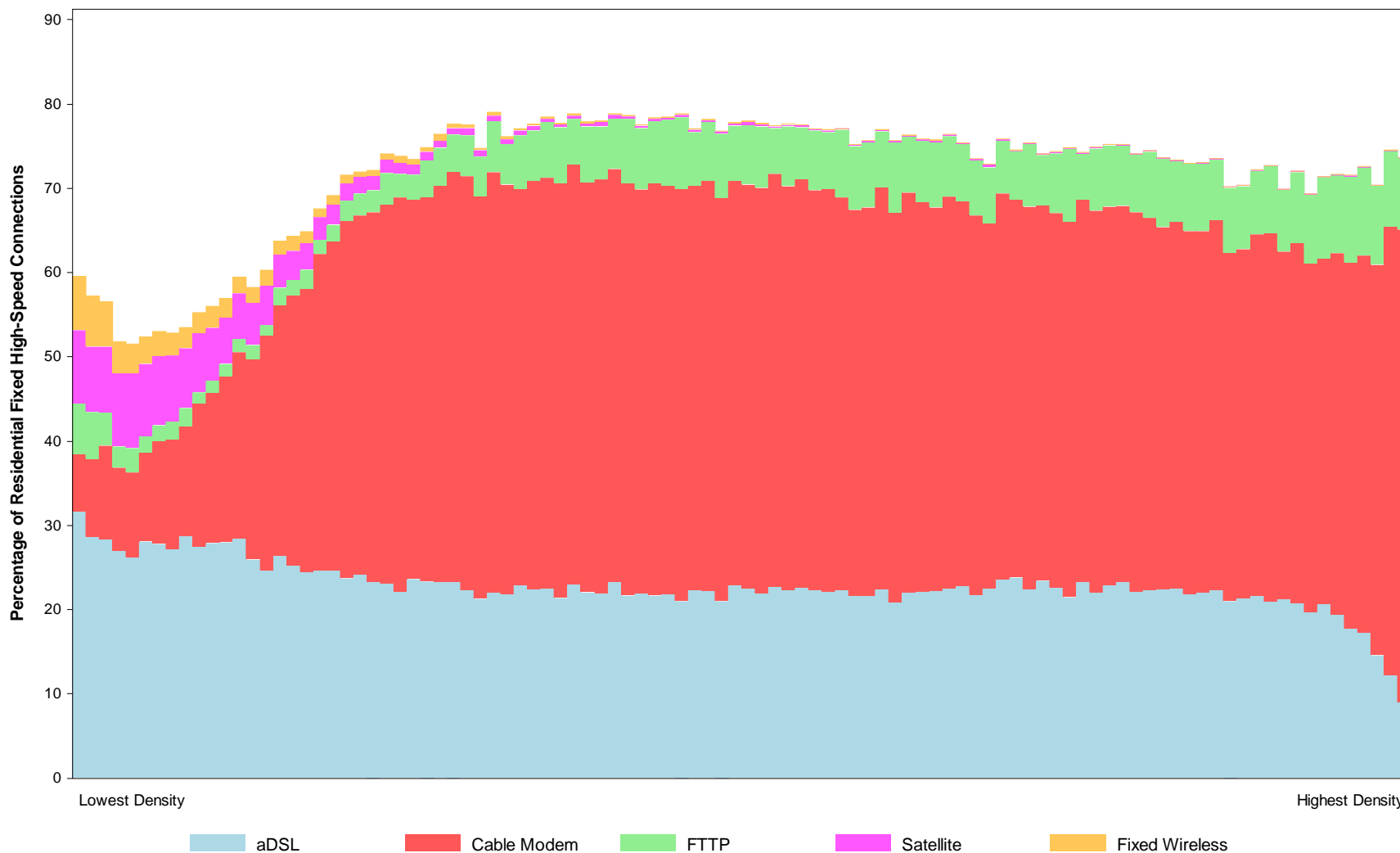
Chart 26
Subscriber Ratio Distributions by Share White Alone (in Deciles) as of December 31, 2013



Note: Each box plot shows the distribution of residential subscription to connections over 200 kbps in at least one direction for counties in each race decile. Counties were grouped into deciles based on the share of the county population that reported their race as white alone. Some of the features are labeled, but note also that + denotes the position of the average residential subscription ratio taken across all counties in the decile; ⊥ is the minimum observation above Q1-1.5(Q3-Q1); T is the maximum observation below Q3+1.5(Q3-Q1); and □ is a data point beyond Q1-1.5(Q3-Q1) or Q3+1.5(Q3-Q1). Ratios greater than 1 were set to 1.

Sources: FCC Form 477, Part VI; Geolytics 2013 Block-Level Estimates (Households in 2013); and 2008-2012 ACS 5-year Estimates (Race).

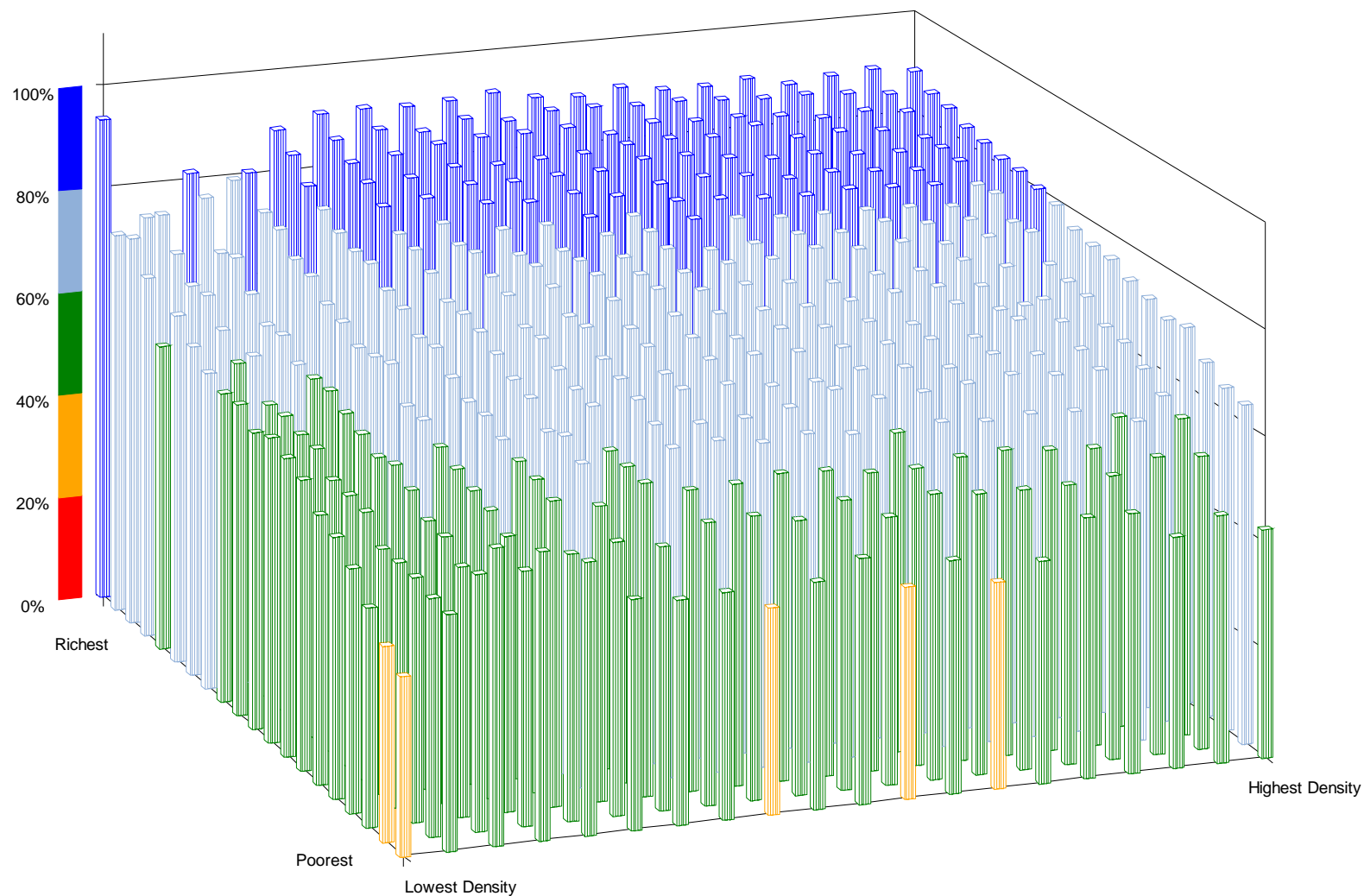
Chart 27
Subscribership Ratios by Technology and Tract Household Density as of December 31, 2013
(Residential fixed connections over 200 kbps in at least one direction)



This chart shows subscribership ratios by technology and household density. Tracts were grouped into 100 density percentiles based on households per square mile, calculated as the ratio of estimated tract households in 2013 to tract land area from the Census Bureau. For each percentile, the height of the bar represents the household-weighted average ratio of residential fixed connections to households across tracts in the percentile.

Sources: FCC Form 477, Part VI; Geolytics 2013 Block-Level Estimates (Households in 2013); and Census 2010 (Tract land area).

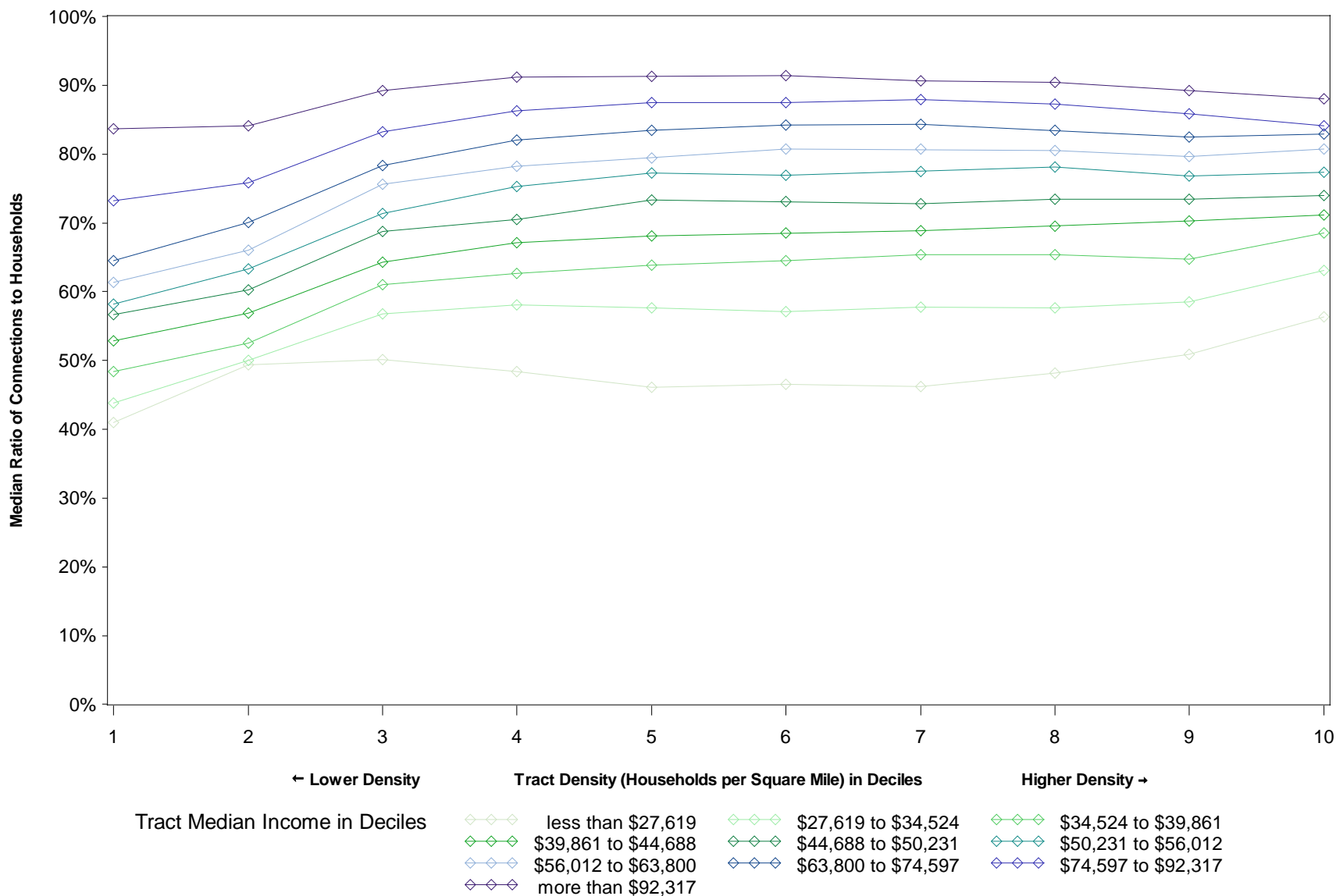
Chart 28
Average Subscribership Ratios by Income and Household Density as of December 31, 2013
(Residential fixed connections over 200 kbps in at least one direction by Tract)



This chart shows subscribership ratios by household density and income quantiles. Tracts were grouped into 400 density/income quantiles based on households per square mile, calculated as the ratio of estimated tract households in 2013 to tract land area from the Census Bureau, and median household income. For each quantile, the height of the bar represents the household-weighted average ratio of residential fixed connections to households across tracts in the decile.

Sources: FCC Form 477, Part VI; Geolytics 2013 Block-Level Estimates (Households in 2013); Census 2010 (Tract land area); 2008-2012 ACS 5-year Estimates (Median household income).

Chart 29
Median Ratios of Residential Fixed Connections over 200 kbps in at Least One Direction to Households by Income and Density
Tract Data as of December 31, 2013



Sources: FCC Form 477, Part VI; Geolytics 2013 Block-Level Estimates (Households in 2013); and 2008-2012 ACS 5-year Estimates (Median household income).

Technical Notes

General

Detailed information about FCC Form 477 reporting requirements is available at www.fcc.gov/form477.

Wherever a number of providers is cited in this report, multiple Form 477 filers within a holding company structure count as one provider.

Form 477 collects information about Internet access connections in service to end-user locations that are advertised to deliver information to and/or from the end user – that is, in at least one direction – at transfer rates (“speeds”) above 200 kilobits per second (kbps). Information is collected about connections in 72 speed tiers (nine upstream tiers and eight downstream) defined by ranges of upstream speeds and downstream speeds. Connections are further categorized by the technology employed by the part of the connection that terminates at the end-user location.

“End users” are residential, business, institutional, or government entities who use services for their own purposes and who do not resell such services to other entities. Facilities-based providers report information about connections they provide directly to their own end-user customers and also connections that they provide to Internet Service Providers for resale to end users. For Form 477 purposes, the facilities-based provider of a connection is the entity that owns the portion of the physical facility that terminates at the end-user location, obtains an unbundled network element (UNE), special access line, or other leased facility that terminates at the end-user location and provisions/equips it as a connection that transfers information at rates over 200 kbps in at least one direction, or provisions/equips a wireless channel that transfers information at rates over 200 kbps in at least one direction to the end-user location over licensed spectrum or over spectrum that the provider uses on an unlicensed basis.

The mutually exclusive Form 477 technology categories are: asymmetric Digital Subscriber Line (“aDSL” in this report), symmetric Digital Subscriber Line (“sDSL”), other wireline, cable modem, optical fiber to the end-user premises (“FTTP”), satellite, fixed wireless (using licensed or unlicensed spectrum), mobile wireless (using licensed or unlicensed spectrum), electric power line, and all other (which is included to capture deployment of additional technologies over time). In the Form 477 data collection, aDSL-based services delivered over fiber-to-the-node architecture are reported in the aDSL category. The other wireline category comprises T1/DS1, T3/DS3, and other copper-based connections, not elsewhere categorized, that deliver *Internet access* service at the end-user location. Ethernet connections delivering Internet access service are reported in the other wireline category if the connection terminates over copper and in the FTTP category if the connection terminates over fiber. Connections deployed over hybrid fiber-coax (HFC) architecture are reported in the cable modem category. Wireless ISPs (“WISPs”) report in the fixed wireless category if providing service to dispersed, fixed end-user locations and report in the mobile wireless category if providing a commercial service that can be received at any location within a service footprint. Wireless local area networks (such as Wi-Fi hotspots) that only enable local distribution and sharing of a premises connection are not included, although the shared premises connection is included.

Numbers of connections presented in this report are not adjusted for the number of persons at a single end-user location who have access to, or who use, the Internet access services delivered over the connection to that location.

Numbers of residential connections are estimated based on the total connections and percentage-residential connections information reported on Form 477.

Census tracts

Starting with data as of December 31, 2008, facilities-based providers of reportable fixed-location Internet access connections must report connection counts and percentage residential information at the census tract level of detail. Because of the inherent mobility of their service, facilities-based mobile wireless providers do not report subscriber counts by census tract. Instead, they report the census tracts in the state that best represent the areas where service is available over the provider's own network, for each of the speed tiers in which the provider offers service.

The census tract-level data summarized in this report were collected for tracts in the 2010 decennial census. For the purposes of this report, there are 73,767 census tracts because we exclude census tracts delineated specifically to cover large bodies of water.

About 110 of the census tracts have population but no households because the population resides in group living quarters. For the purpose of estimating residential subscribership rates by census tract, we assume these census tracts have no reportable *residential* Internet access service because persons residing in group quarters would have Internet access over a business connection provided to the operator of the group quarters. Therefore, these census tracts are included in the "zero" column.

Ratios of residential fixed-location connections to households that exceed 100%

We estimate the share of households with fixed-location connections in individual census tracts by taking the ratio of the reported number of fixed-location residential service connections to the estimated number of households. We continue to find "outlier" estimates at or above 100% and to find that the number of outliers is substantially reduced when estimates are made for individual counties rather than for individual census tracts.

Possible explanations of ratios at or above 100% include (1) geocoding misallocations of service locations to census tracts; (2) proper allocation of connections to the county level by some filers, but improper allocation of all connections to a single tract in the county; (3) possible overestimation of residential connections in service plans for which the customer base is primarily residential; and (4) connections at seasonally or occasionally occupied housing units, such as vacation homes, while the household is counted elsewhere. Most of the numbers of households in census tracts that were used to generate the estimated ratios are themselves estimates (from GeoLytics, Inc.), which could have an independent effect.

Maps showing residential subscribership rates by census tract

The two maps based on estimated Internet access connections over 200 kbps in at least one direction per 1,000 households (that is, estimated household subscribership rates) exclude all connections identified as business connections and necessarily exclude residential mobile wireless connections (which are reported for the state but not for individual census tracts).

Glossary

Term	Definition
aDSL	Asymmetric Digital Subscriber Line: A digital local loop typically using copper facilities and providing greater bandwidth in one direction than the other.
Cable modem service	A service which offers customers access to the Internet over a cable system.
Downstream speed	Speed of transmission from the Internet to the end user.
End users	Residential, business, institutional, or government entities who use services for their own purposes and who do not resell such services to other entities.
Facilities-based provider	Entity that owns the portion of the physical facility that terminates at the end-user location, obtains an unbundled network element (UNE), special access line, or other leased facility that terminates at the end-user location and provisions/equips it as a connection that transfers information at rates over 200 kbps in at least one direction, or provisions/equips a wireless channel that transfers information at rates over 200 kbps in at least one direction to the end-user location over licensed spectrum or over spectrum that the provider uses on an unlicensed basis.
Fixed wireless	A radio communication service between specified fixed points.
Fixed-location technologies	All technologies other than terrestrial mobile wireless.
FTTH or FTTP	Fiber to the Home (Premises): A network access architecture in which optical fiber is deployed all the way to the customer's home (premises).
Internet access service	Service that provides end users access to the Internet.
ISPs	Internet Service Providers: Companies or organizations that provide Internet access service (see above).
iVoIP	Interconnected Voice Over Internet Protocol: A service that enables real-time, two-way voice communications; requires a broadband connection from the user's location; requires Internet-protocol compatible customer premises equipment; and permits users generally to receive calls that originate on the public switched telephone network and to terminate calls to the public switched telephone network.
Mobile wireless service	A radio communication service between mobile and fixed stations, or between mobile stations.
Mobile wireless provider	Provider of mobile wireless service (see above).
Other wireline	All copper-wire based technologies other than DSL technologies; Ethernet over copper and T-1 are examples.
Power line	Internet access service delivered over electric power transmission lines.
Satellite communications	A telecommunications service provided via one or more satellite relays and their associated uplinks and downlinks.
sDSL	Symmetric Digital Subscriber Line: DSL technology that provides equal bandwidth for both uploads and downloads.

Speed tiers	Sub-groupings defined by ranges of upstream speeds and downstream speeds.
Upstream speed	Speed of transmission from the end user to the Internet.
Wi-Fi hotspot	Wireless Fidelity: Generic term referring to any type of IEEE 802.11 wireless network. A hotspot is a small geographic area in which users can gain access to a Wi-Fi network which in turn connects to the Internet.
Wireless service	Telephone, Internet, data, and other services provided to customers through the transmission of signals over networks of radio towers.
Wireless service provider	Provider of wireless service (see above).
Wireless telecommunications	Any means of electronic data transfer using electromagnetic means, most commonly radio waves.
WISP	Wireless ISP: A company that provides end users with wireless access to the Internet, most commonly by using radio spectrum designated for unlicensed use.
WLAN	Wireless local area network: A WLAN uses radio waves to connect user devices to a local area network (LAN), thereby extending an existing wired LAN.

Customer Response

Publication: *Internet Access Services: Status as of December 31, 2013*

You can help us provide the best possible information to the public by completing this form and returning it to the Industry Analysis and Technology Division of the FCC's Wireline Competition Bureau.

1. Please check the category that best describes you:

- ☐ press
- ☐ current telecommunications carrier
- ☐ potential telecommunications carrier
- ☐ business customer evaluating vendors/service options
- ☐ consultant, law firm, lobbyist
- ☐ other business customer
- ☐ academic/student
- ☐ residential customer
- ☐ FCC employee
- ☐ other federal government employee
- ☐ state or local government employee
- ☐ Other (please specify)

2. Please rate the report: Excellent Good Satisfactory Poor No opinion

Data accuracy	()	()	()	()	()
Data presentation	()	()	()	()	()
Timeliness of data	()	()	()	()	()
Completeness of data	()	()	()	()	()
Text clarity	()	()	()	()	()
Completeness of text	()	()	()	()	()

3. Overall, how do you rate this report? Excellent Good Satisfactory Poor No opinion

() () () () ()

4. How can this report be improved?

5. May we contact you to discuss possible improvements?

Name:

Telephone #:

To discuss the information in this report, contact: 202-418-0940 or for users of TTY equipment, call 202-418-0484		
Fax this response to	or	Mail this response to
202-418-0520		FCC/WCB/IATD, Mail Stop 1600 F Washington, DC 20554